CSD Education Survey

Data on Your Side: Supply and Demand for Faculty-Researchers and Clinicians

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Disclosure Notice

- Jennifer P. Taylor has a nonfinancial relationship with the Council of Academic Programs in Communication Sciences and Disorders as VP for Organizational Advancement.

- Loretta Nunez has a financial relationship with the American Speech-Language-Hearing Association that pays her salary.

- Judy Blackburn has a financial relationship with the American Speech-Language-Hearing Association that pays her salary.

- Sarah Slater has a financial relationship with the American Speech-Language-Hearing Association that pays her salary.

Learner Outcomes

1. Describe national data trends for admission, enrollment, and graduation rates among graduate audiology and speech-language pathology programs, including trends toward increasing diversity in the field.

2. Identify data collected through the CSD Education Survey, the U.S. Bureau of Labor Statistics, and ASHA Survey Research and Reports that can describe current workforce characteristics and employment projections for the audiology and speech-language pathology professions.

3. Describe national data trends for PhD researcher education and employment in communications sciences and disorders.

Overview

Agenda:

1. Pipeline data
2. Workforce data
3. Workforce demand data
4. Survey updates
5. Q&A

CSD Education Survey

1. Data source for CSD undergraduate and graduate education

2. Data are used in
   - EdFind
   - National Aggregate Report
   - State Aggregate Reports
   - Trend Reports

3. 90% response rate for 2018 survey (AY: 2017-2018)

   - (294 out of 325 programs)

4. Reports are available on the ASHA website

5. All programs receive a paper copy of the National Aggregate & State Aggregate reports

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Workforce Supply and Demand Data Sources

- <u>Bureau of Labor Statistics - Occupational Outlook Handbook</u>
  - Provides current and projected data on workforce demand
  - Provides salary and demand data at the national level, state level, and by metropolitan area

- <u>ASHA Survey Research and Reports includes</u>
  - Membership and Affiliation Counts (Year-End), ASHA Membership Surveys, and Surveys for Schools, Audiology, and SLP Health Care personnel
  - Provide data on employment settings, employment rate, salaries, job satisfaction, and demographics

Audiologists

Median Capacity for Admissions

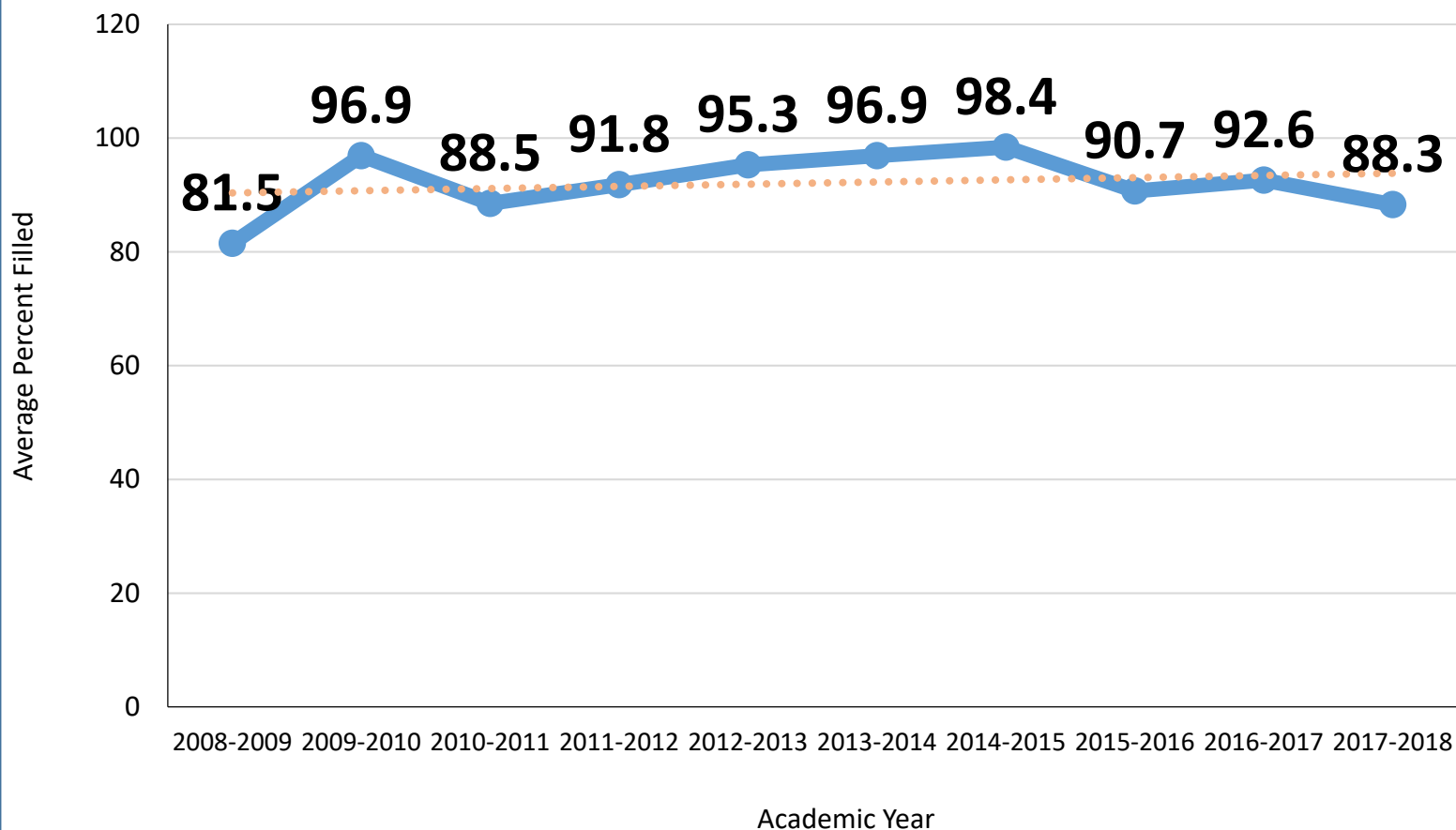## Audiology Clinical Doctorate Entry-Level Programs

(Absolute Numbers)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
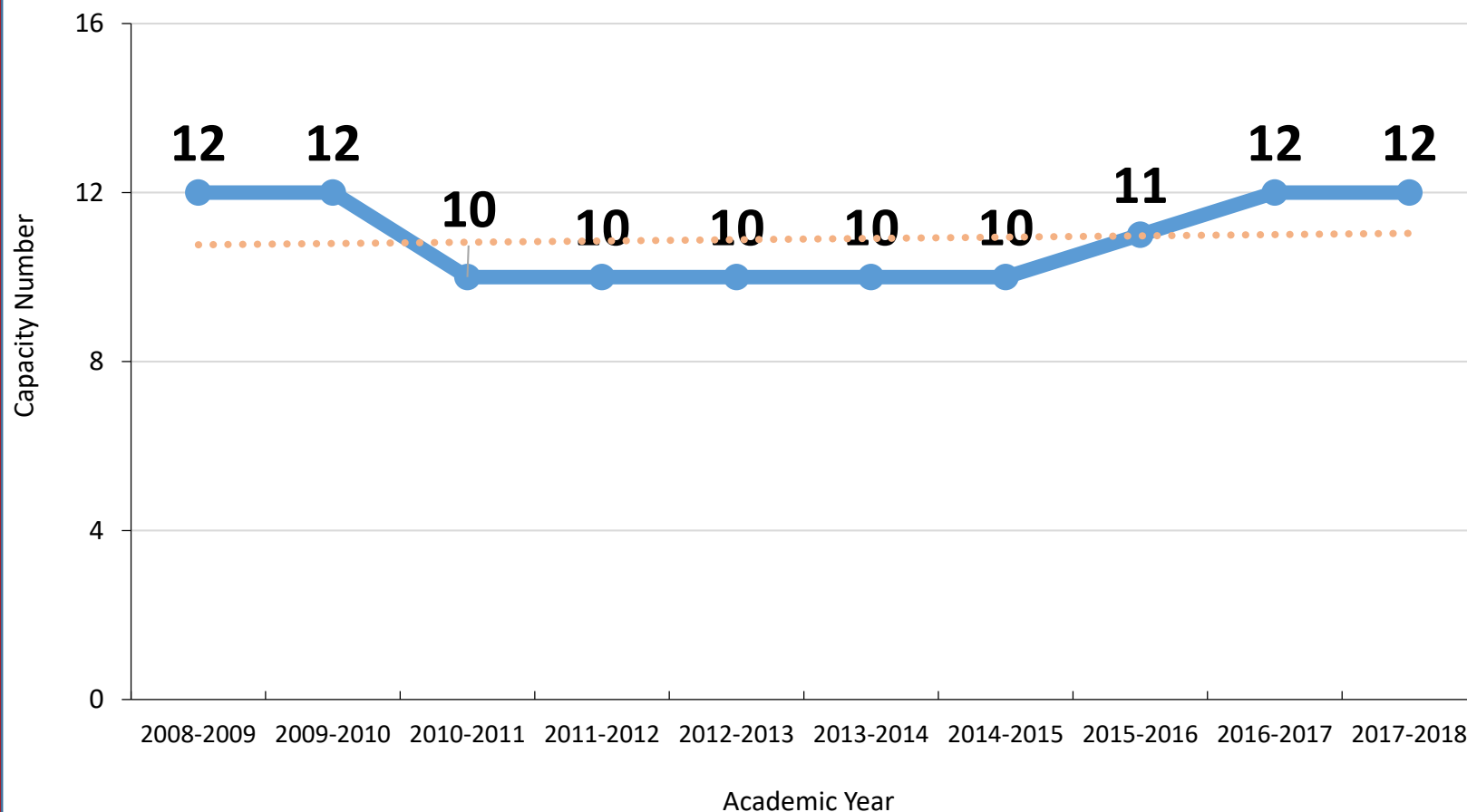
Percent Filled Capacity

Audiology Clinical Doctorate Entry-Level Programs

(First Year Enrollment Divided by Capacity)

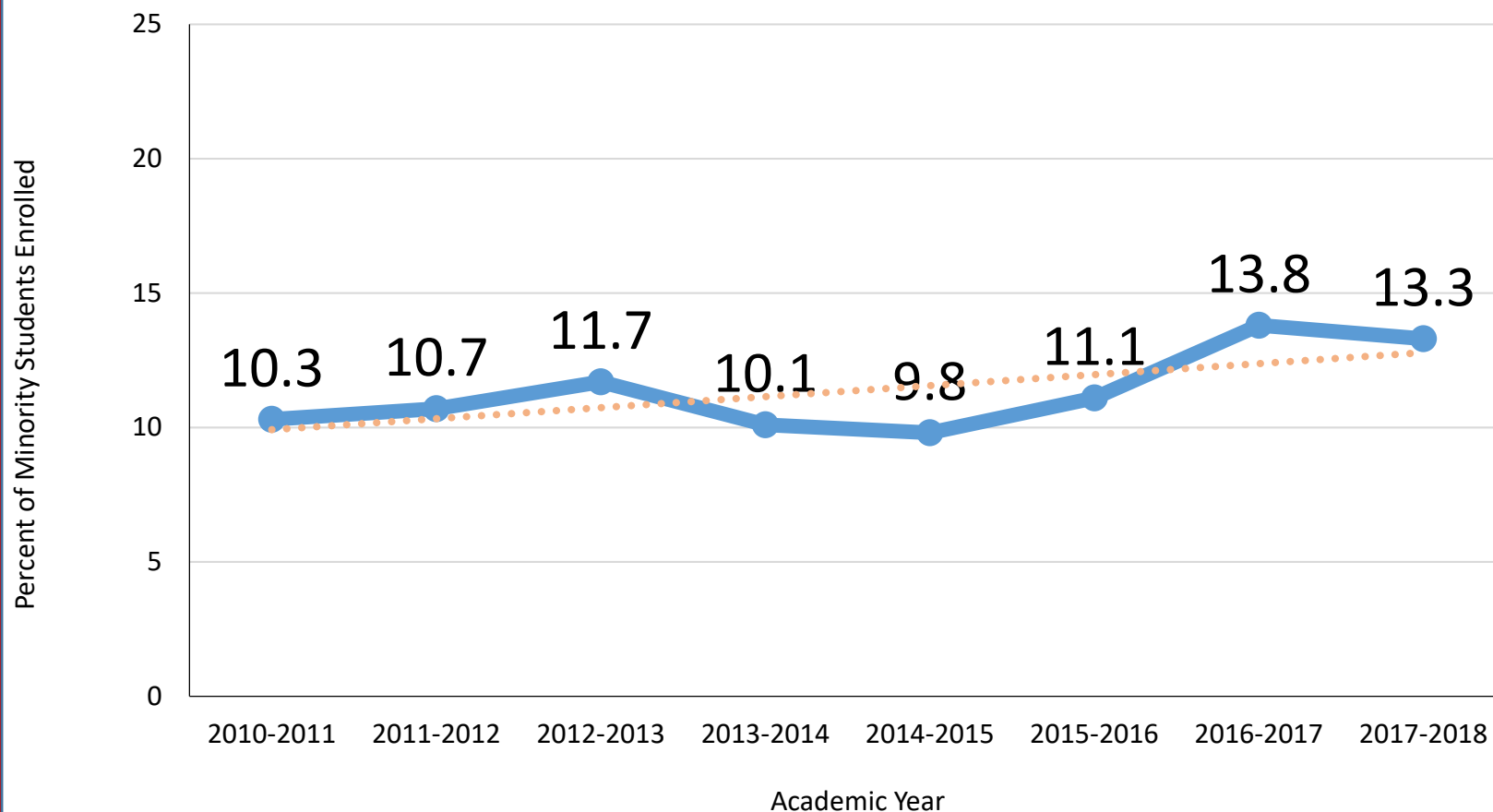Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Total Student Enrollment

Audiology Clinical Doctorate Entry-Level Programs

(Extrapolated to 100% of Programs Reporting)

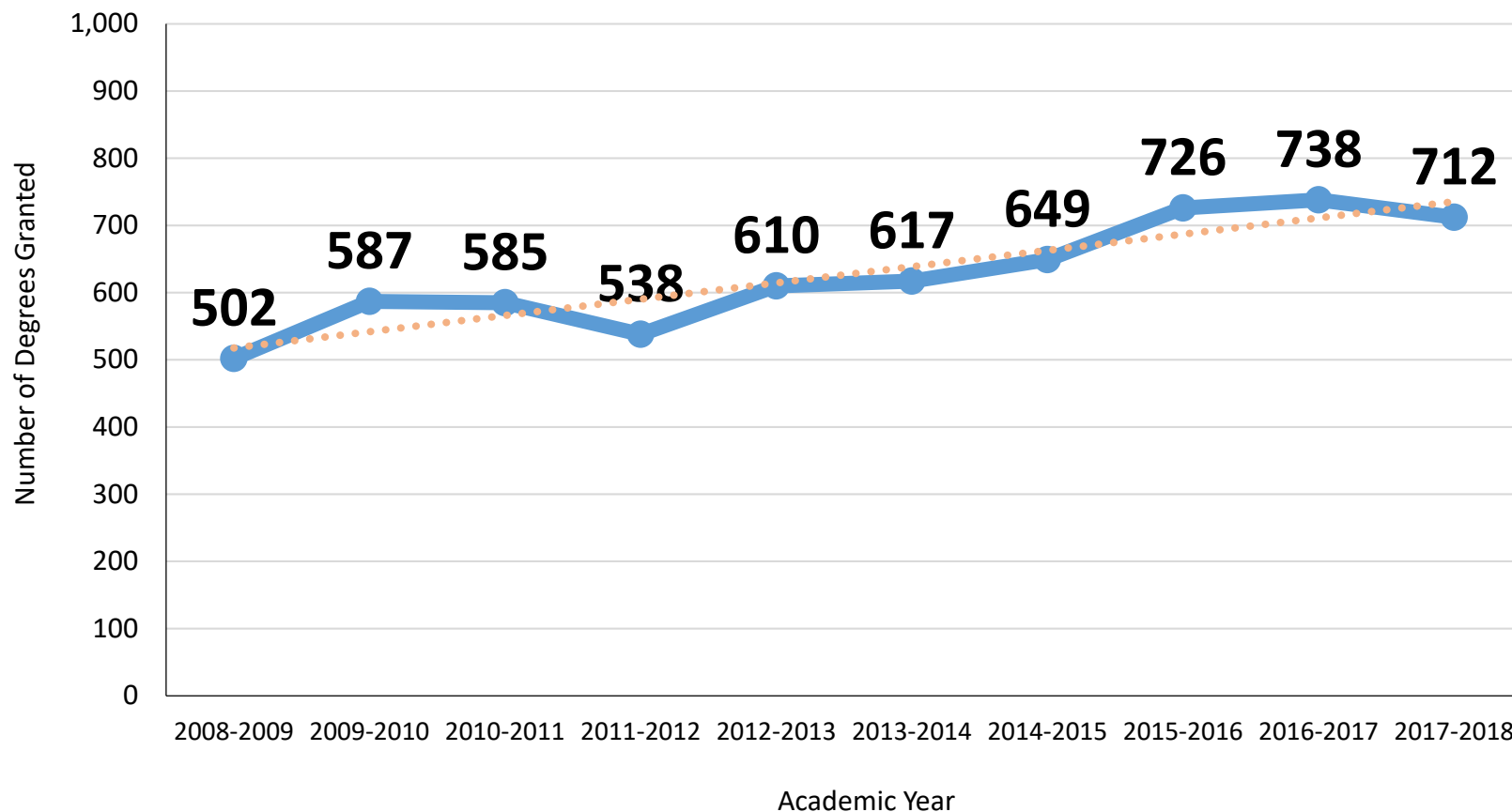Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Minority Student Enrollment

Audiology Clinical Doctorate Entry-Level Programs
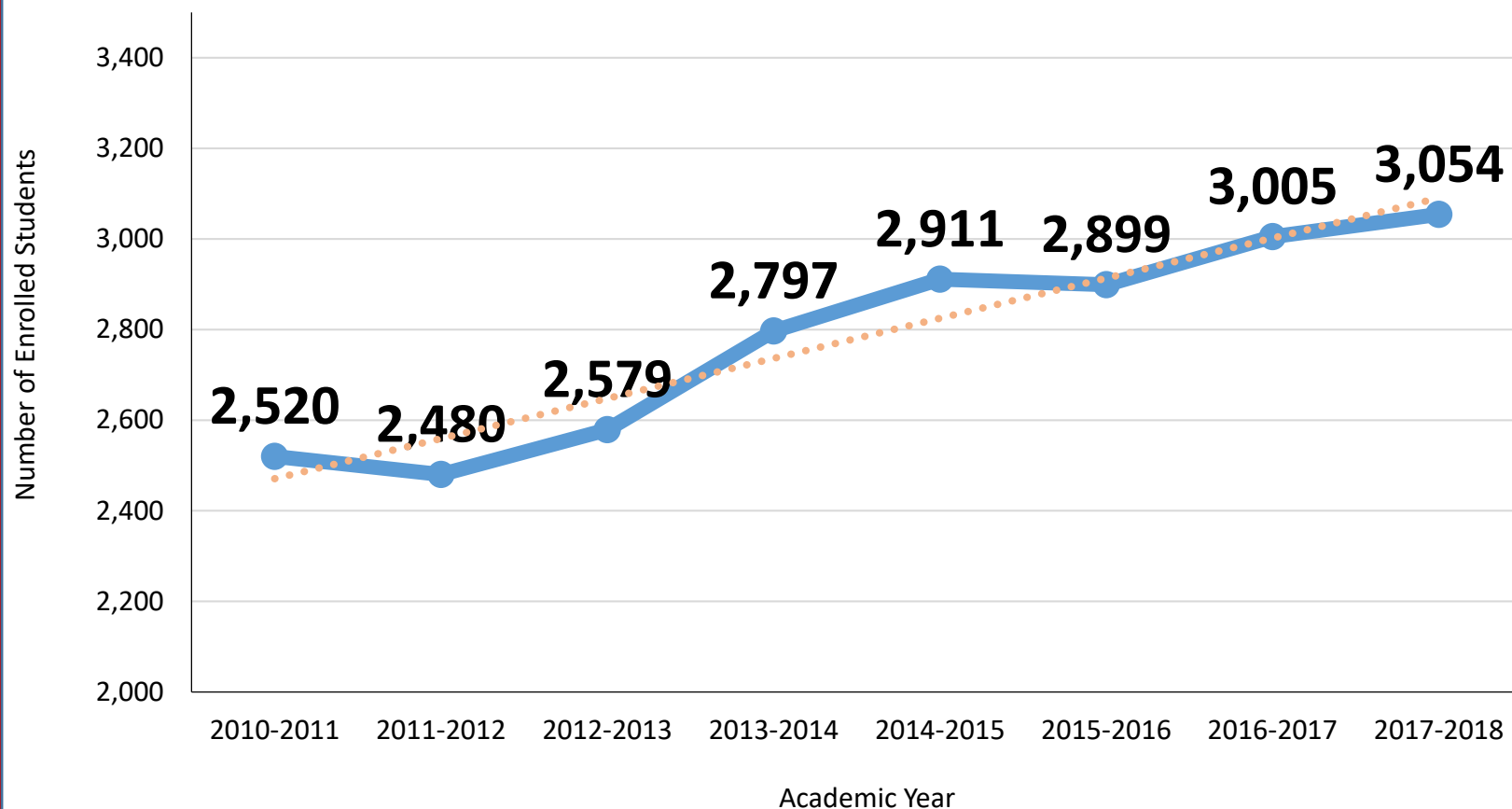
Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
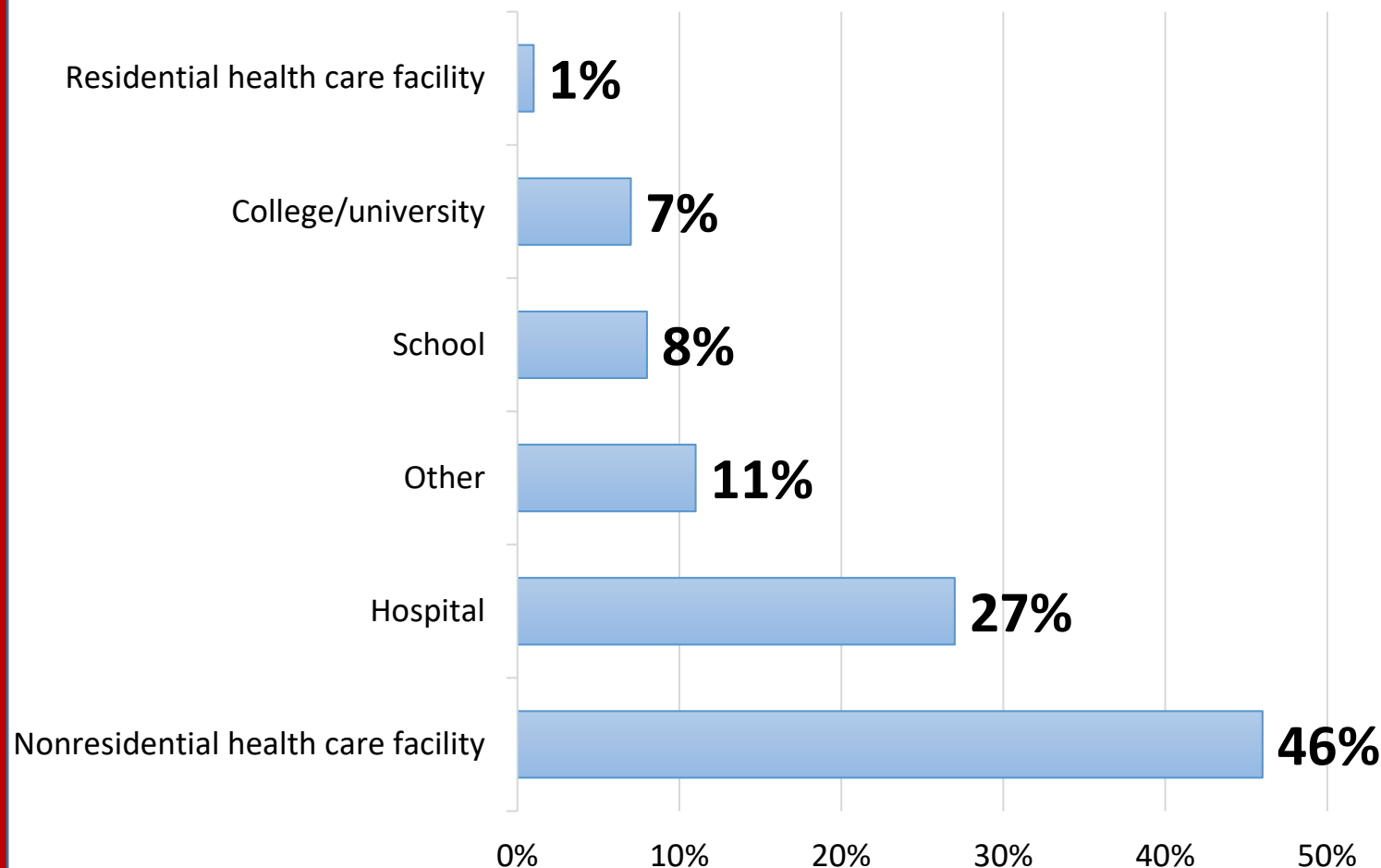
Degrees Granted

Audiology Clinical Doctorate Entry-Level Programs

(Extrapolated to 100% of Programs Reporting)

Source:

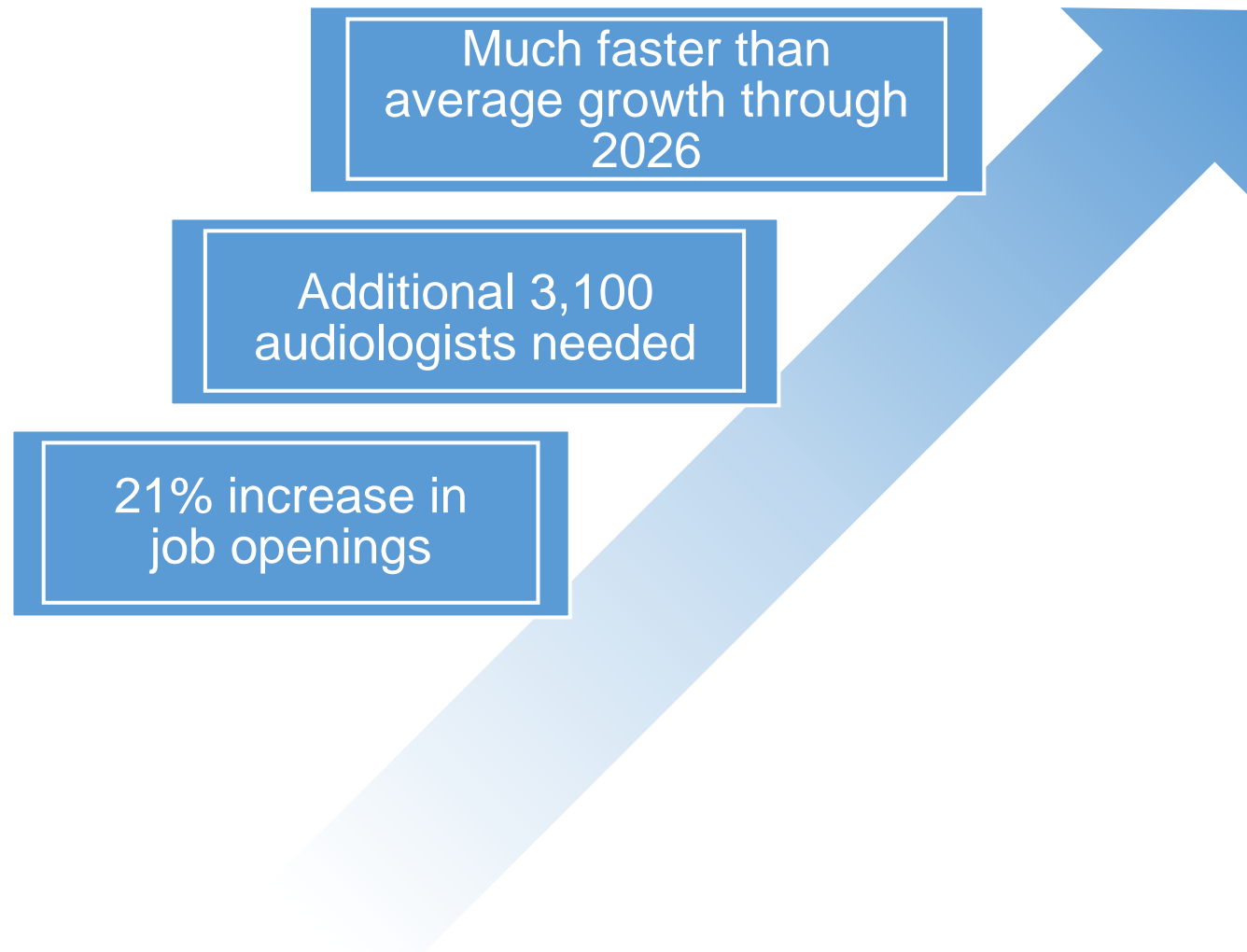# Where We Work
2018 Primary Employment Facility of ASHA-Certified Audiologists

Facility	Percentage
Residential health care facility	1%
College/university	7%
School	8%
Other	11%
Hospital	27%
Nonresidential health care facility	46%

0%   10%   20%   30%   40%   50%

Projected Job Growth for Audiologists

Much faster than average growth through 2026

Additional 3,100 audiologists needed

21% increase in job openings

Source: http://www.bls.gov/ooh/healthcare/audiologists.htm#tab-6

In summary

Remained Relatively Stable

- Number of AuD programs since 2008
- Median capacity for admissions

Changes

- Total enrollment
- Degrees granted
- Projected job growth
- Percent filled capacity

Audiology Supply

- Degrees granted increased by 42% from 2011-2012 to 2017-2018
- BLS predicts a 21% increase in projected job openings for audiologists through 2026
- Supply and demand are in relative balance through 2026
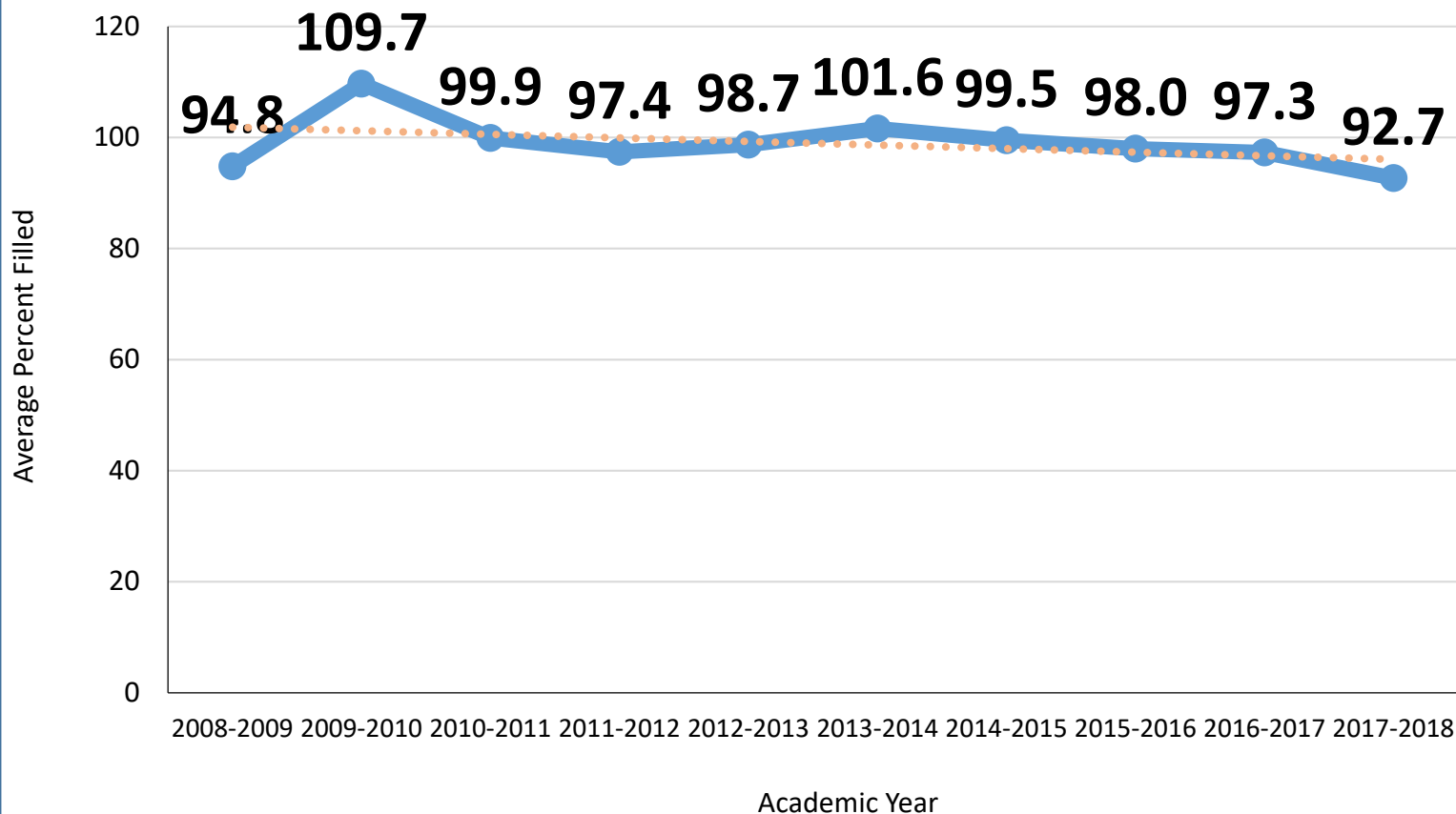
Speech-Language Pathologists

Median Capacity for Admissions

SLP Master's Programs

(Absolute Numbers)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
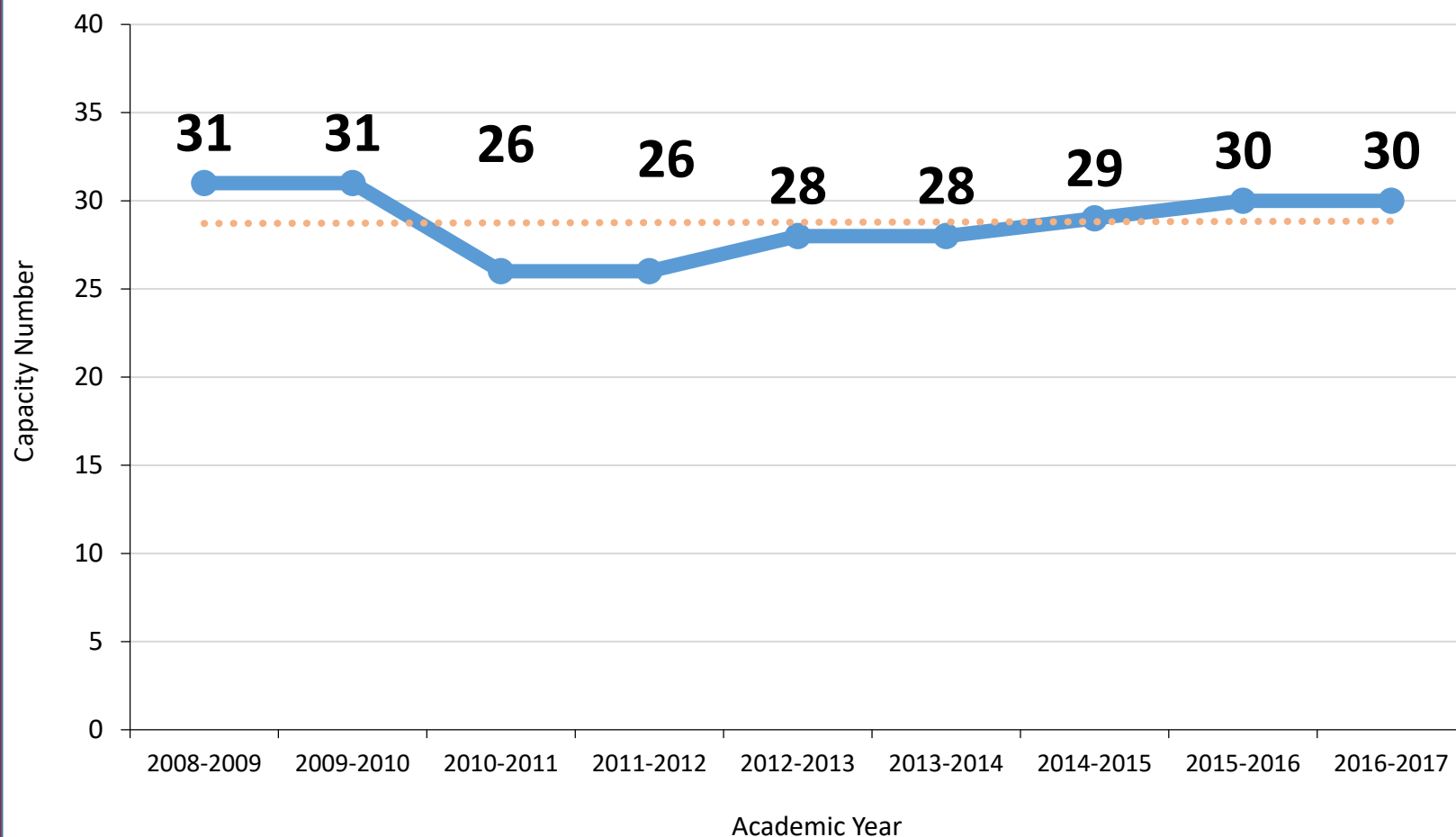
Percent Filled Capacity

SLP Master's Programs

(First Year Enrollment Divided by Capacity)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Total Enrollment

SLP Master's Programs

(Extrapolated to 100% of Programs Reporting)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Minority Student Enrollment

SLP Master's Programs

Percent of Minority Students Enrolled vs **Academic Year**

Academic Year	Percent
2010-2011	13.6
2011-2012	14.3
2012-2013	15.8
2013-2014	15.8
2014-2015	17.1
2015-2016	16.6
2016-2017	17.6
2017-2018	19.1

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
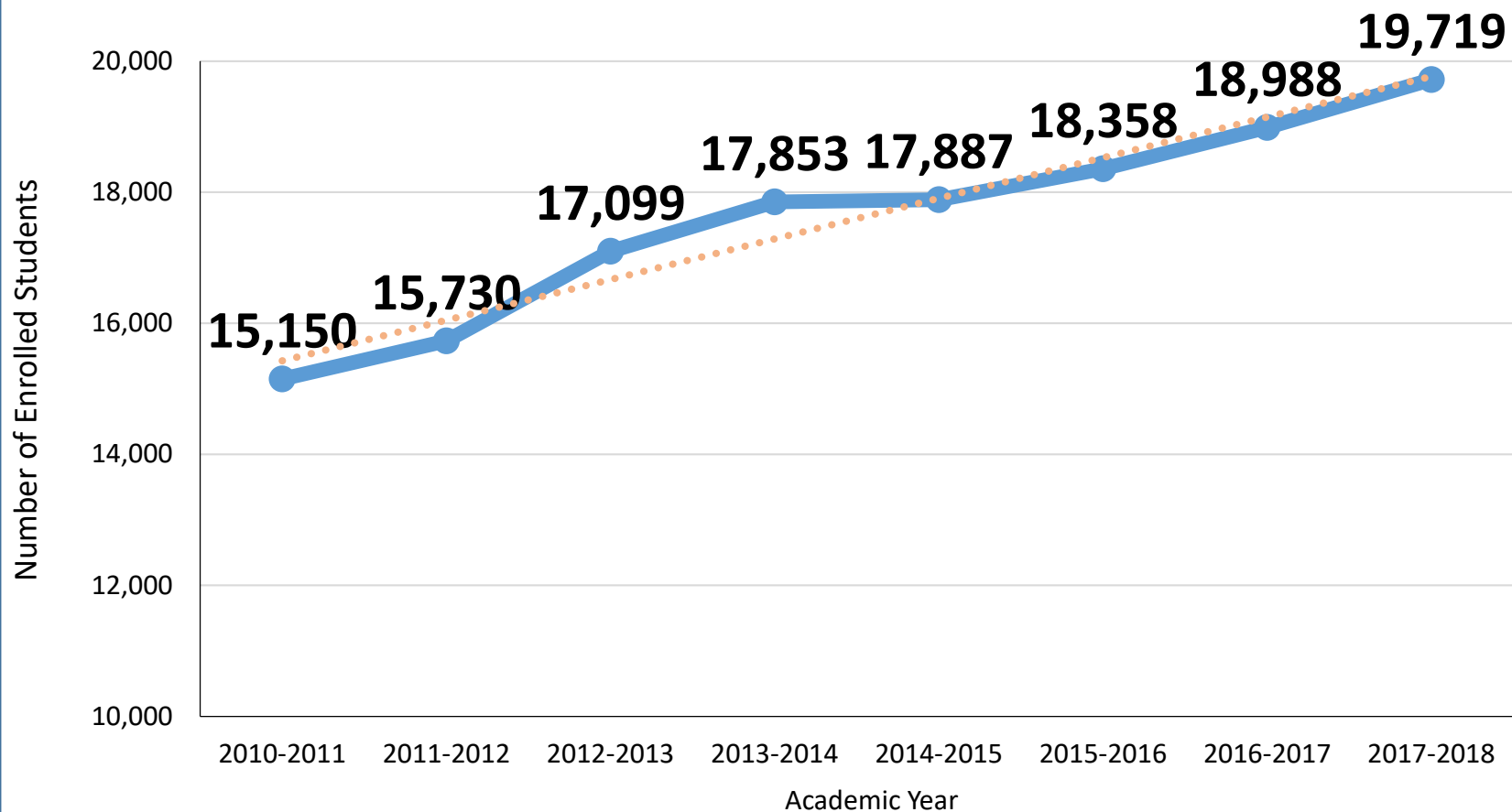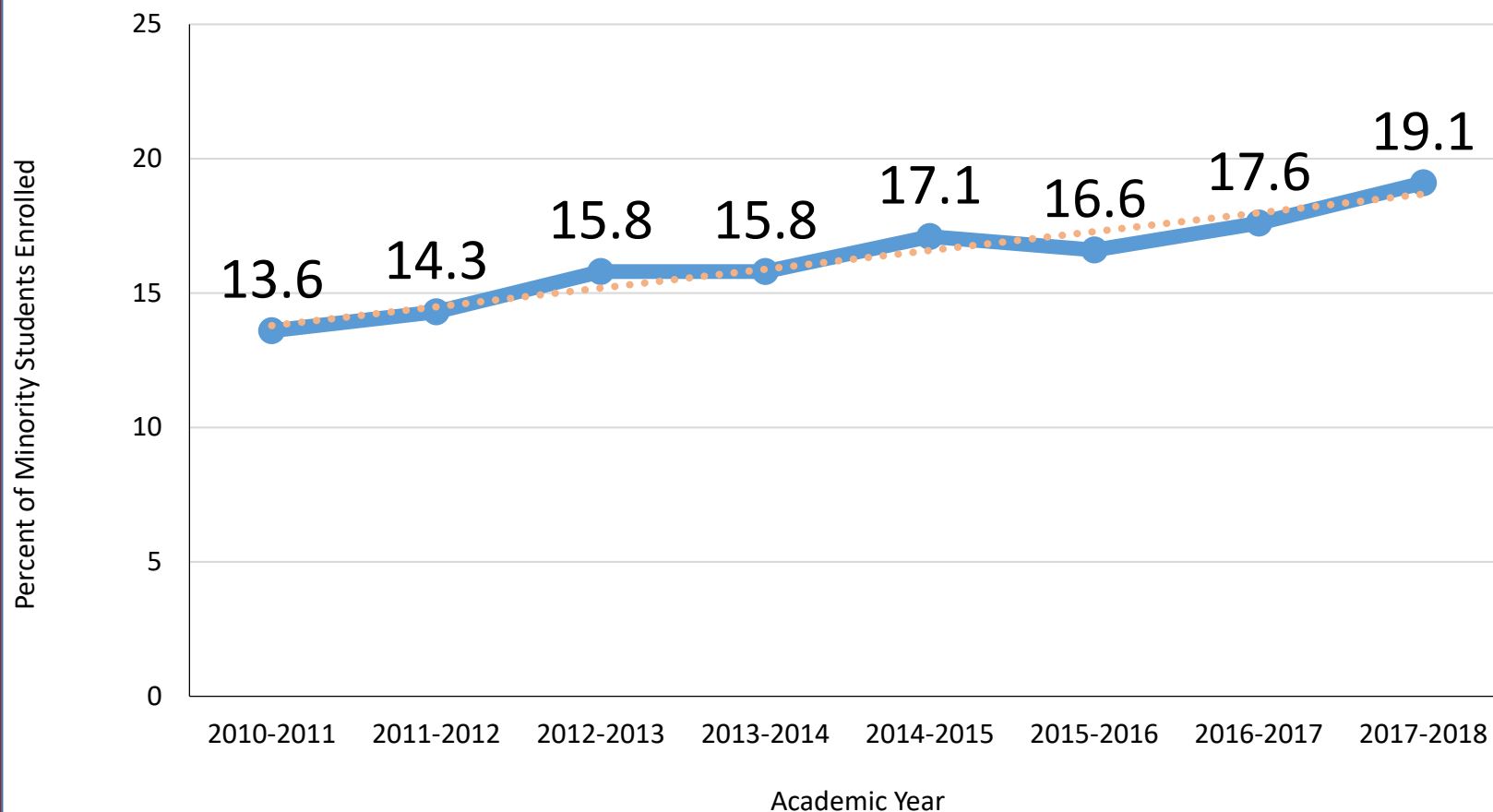
Degrees Granted

SLP Master's Programs

(Extrapolated to 100% of Programs Reporting)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
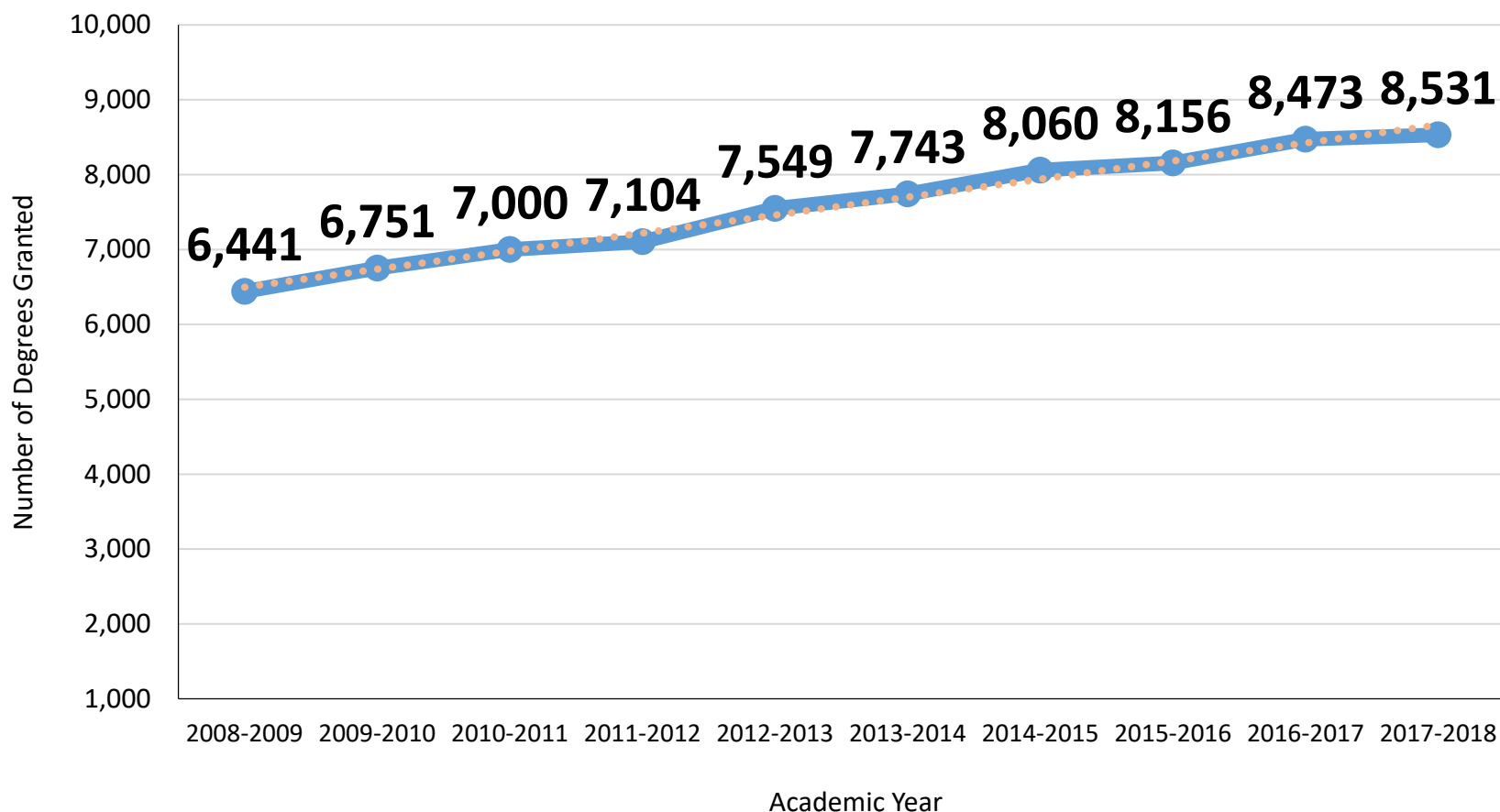
SLP Clinical Doctorate: Post-Entry Level

- Eight institutions offered a post entry-level clinical doctorate in SLP in the 2017-2018 academic year.

- These eight programs received a total of 212 applications, 106 of which were approved for admission.

- Total 2017-2018 enrollment in these eight programs was 282.

- Fifty-one degrees were granted in the 2017-2018 academic year by these eight institutions.

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Where We Work

2018 Primary Employment Facility of ASHA-Certified SLPs

CSD
Education
Survey

Facility	Percentage
College/ University	3%
Other	7%
Residential health care facility	10%
Hospital	13%
Nonresidential health care facility	17%
School	51%

0%   10%   20%   30%   40%   50%   60%

Sources: http://www.asha.org/Research/memberdata/member-counts/

Projected Job Growth for SLPs

Much faster than average growth through 2026

Additional 25,900 SLPs needed

18% increase in job openings

Source: http://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm#tab-6
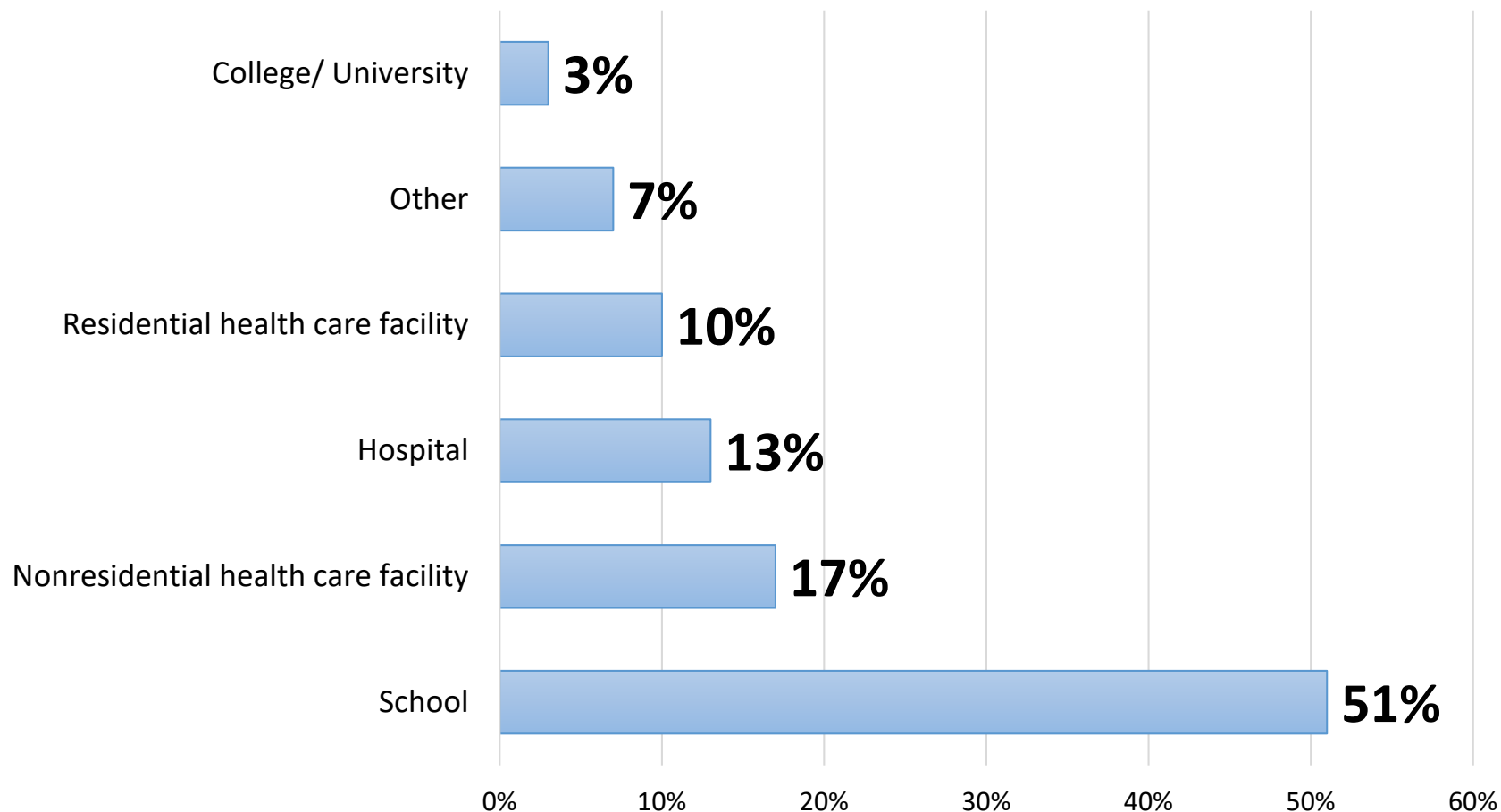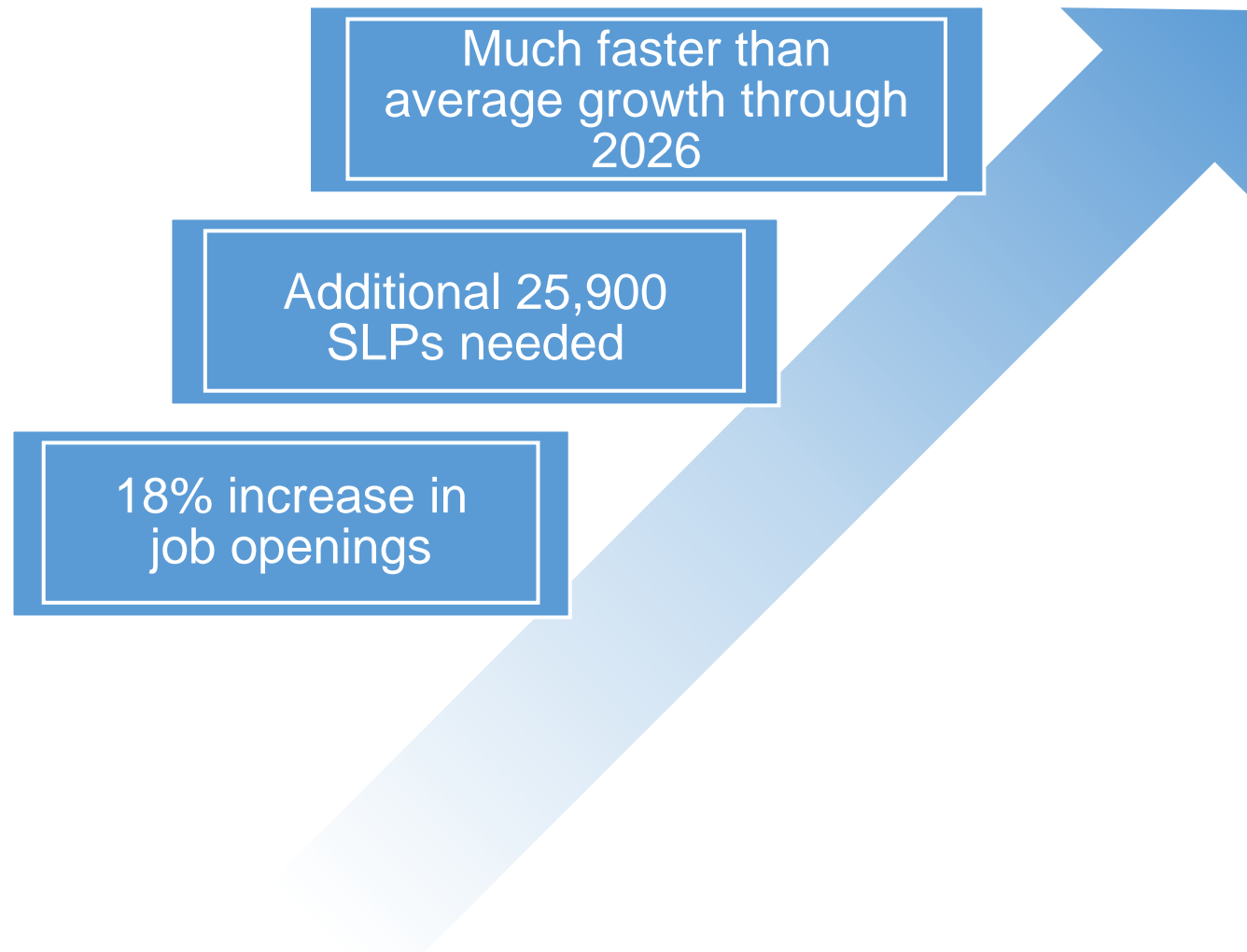
In Summary

Remained Relatively Stable
- Median capacity for admissions
- Percent filled capacity

Changes
- Number of SLP programs since 2010
- Total enrollment
- Degrees granted
- Minority enrollment
- Projected job growth

Speech-Language Pathology Supply
- Degrees granted increased by 32%
- BLS predicts an 18% increase in projected job openings for speech-language pathologists through 2026
- Supply and demand are in relative balance through 2026

PhD Faculty-Researchers

Median Capacity for Admissions

Research Doctorate Programs

(Absolute Numbers)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
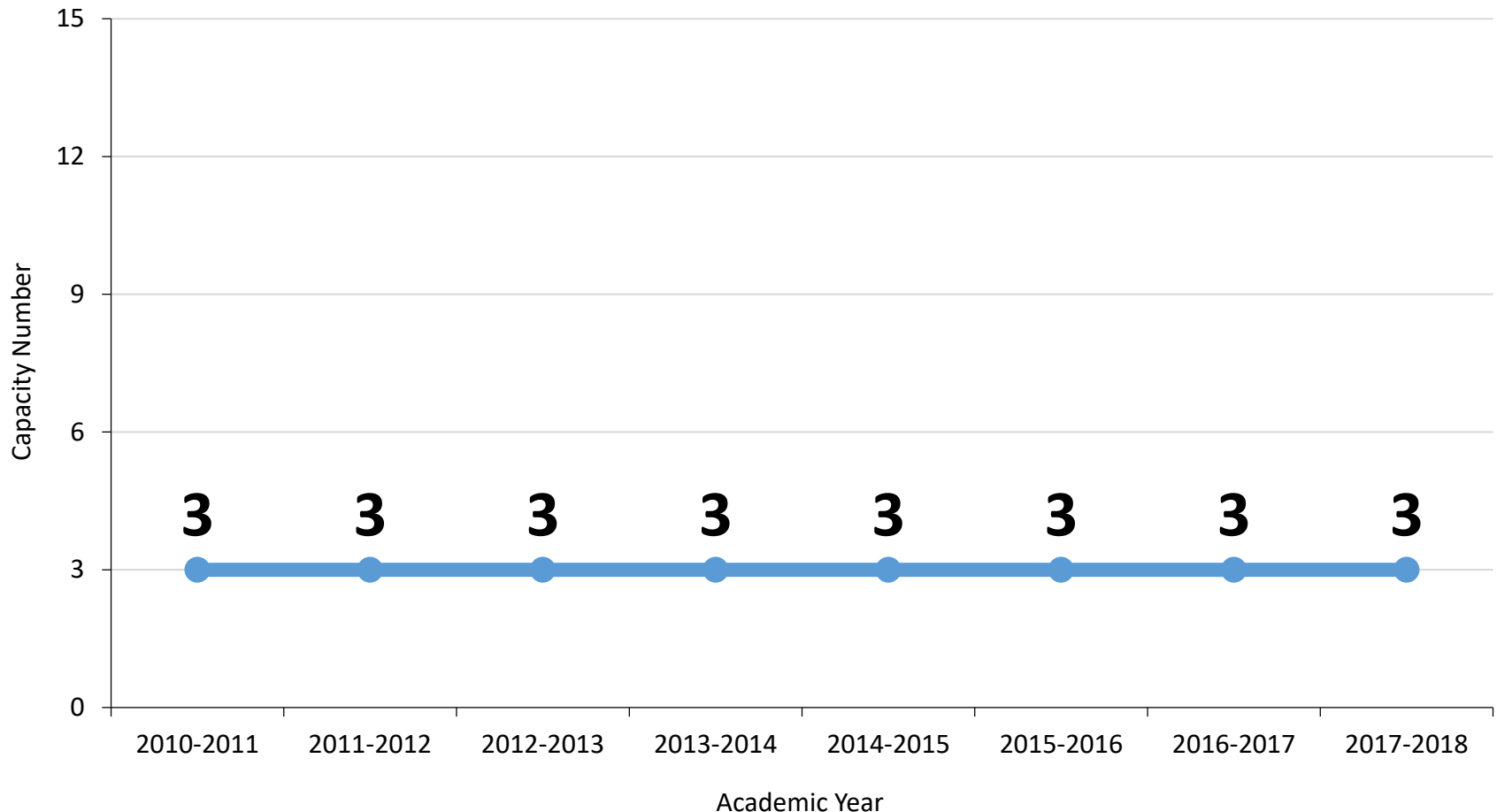
Percent Filled Capacity

Research Doctorate Programs

(First Year Enrollment Divided by Capacity)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
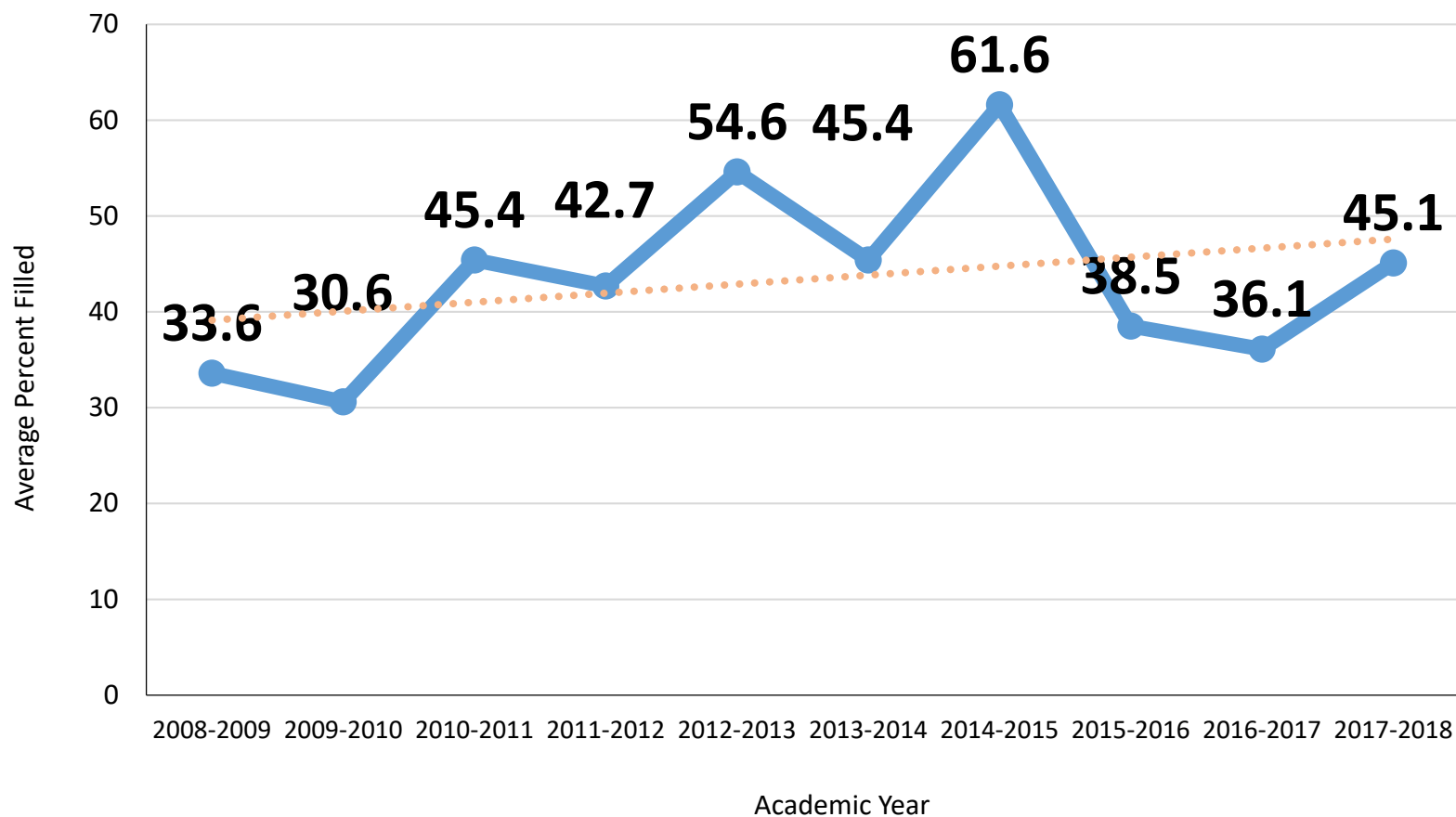
Total Enrollment

Research Doctorate Programs

(Extrapolated to 100% of Programs Reporting)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
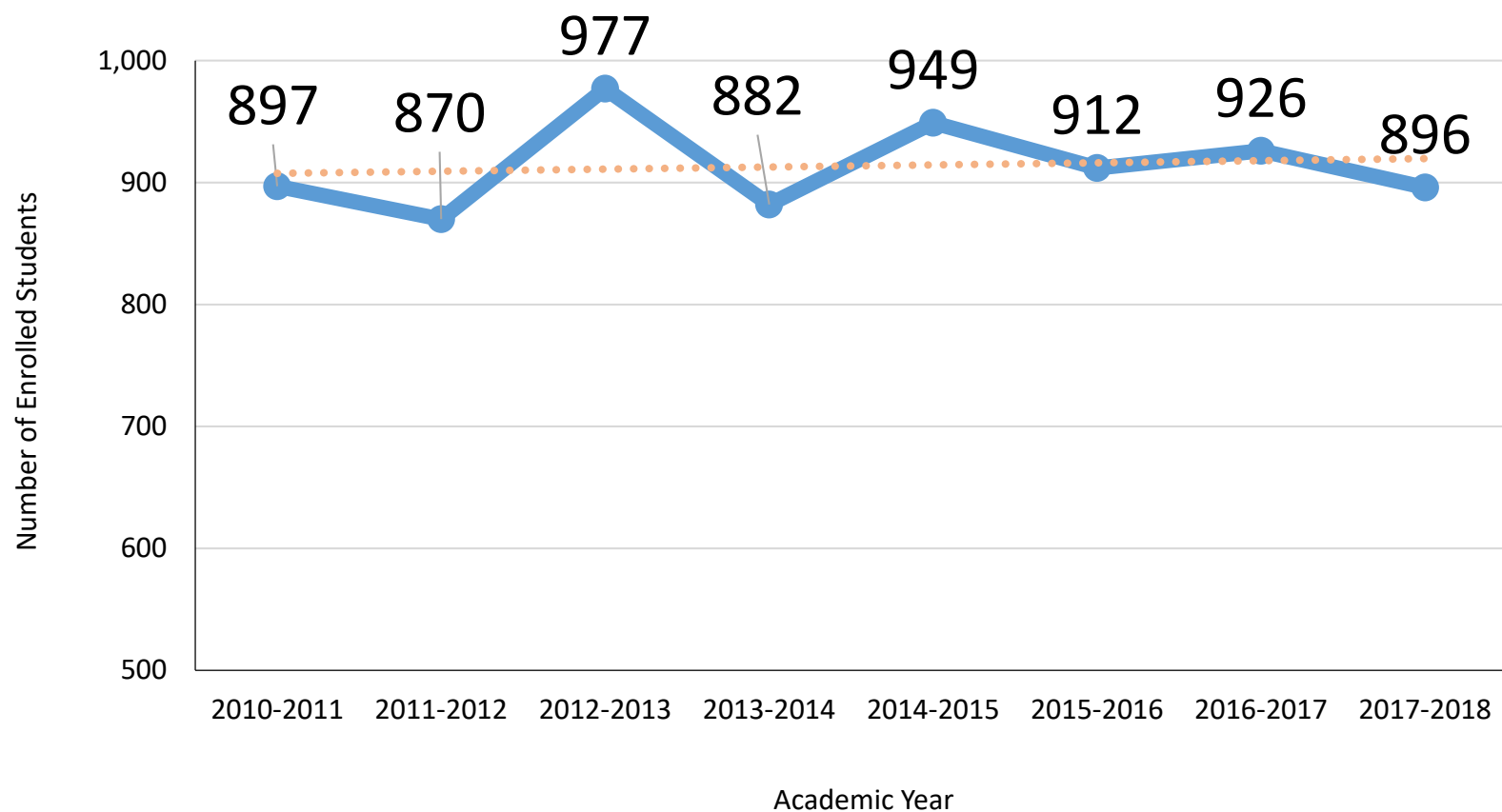
Degrees Granted

Research Doctorate Programs

(Extrapolated to 100% of Programs Reporting)

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/
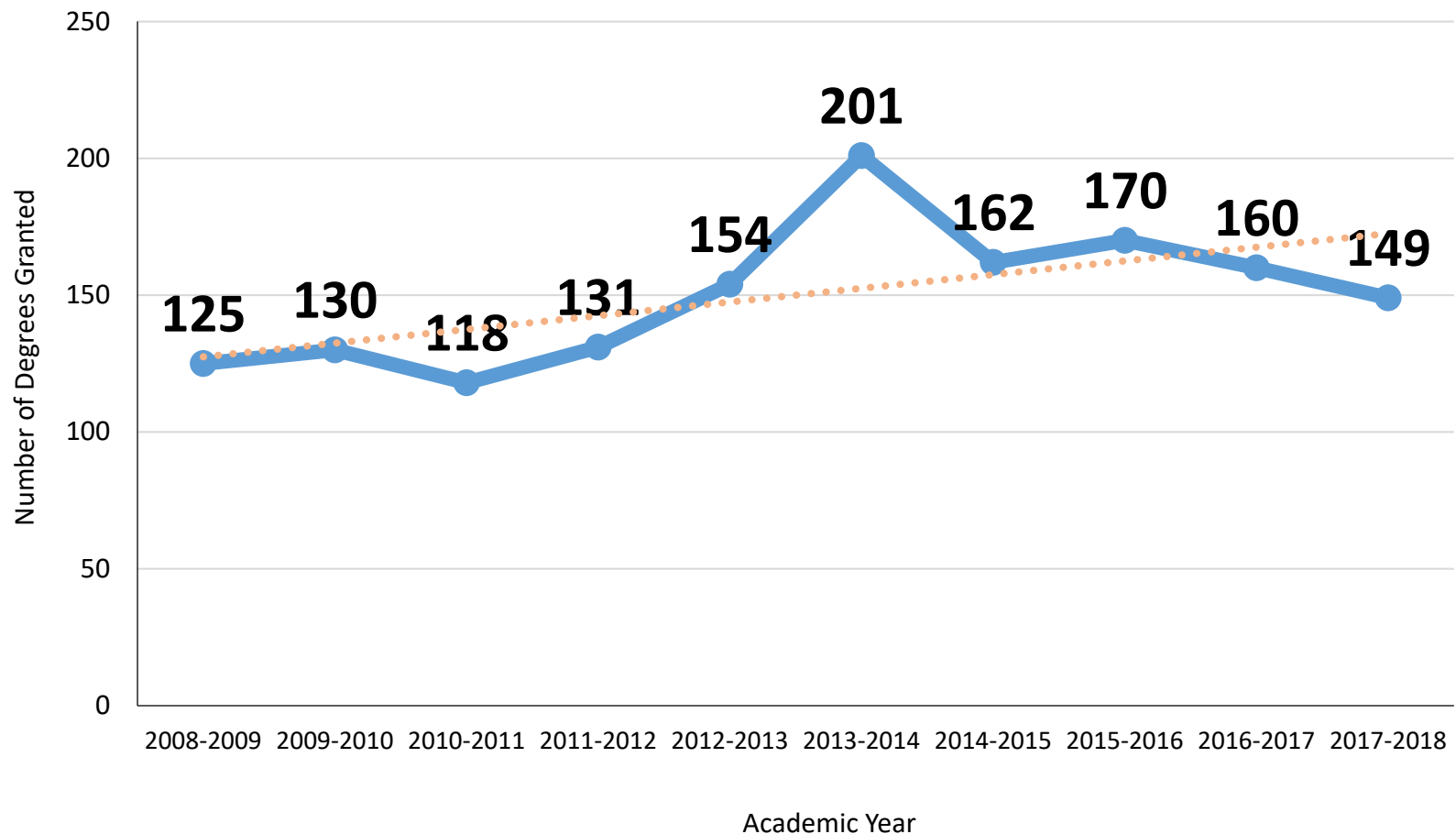
First Employment for Research Doctoral Graduates

(Percentages)
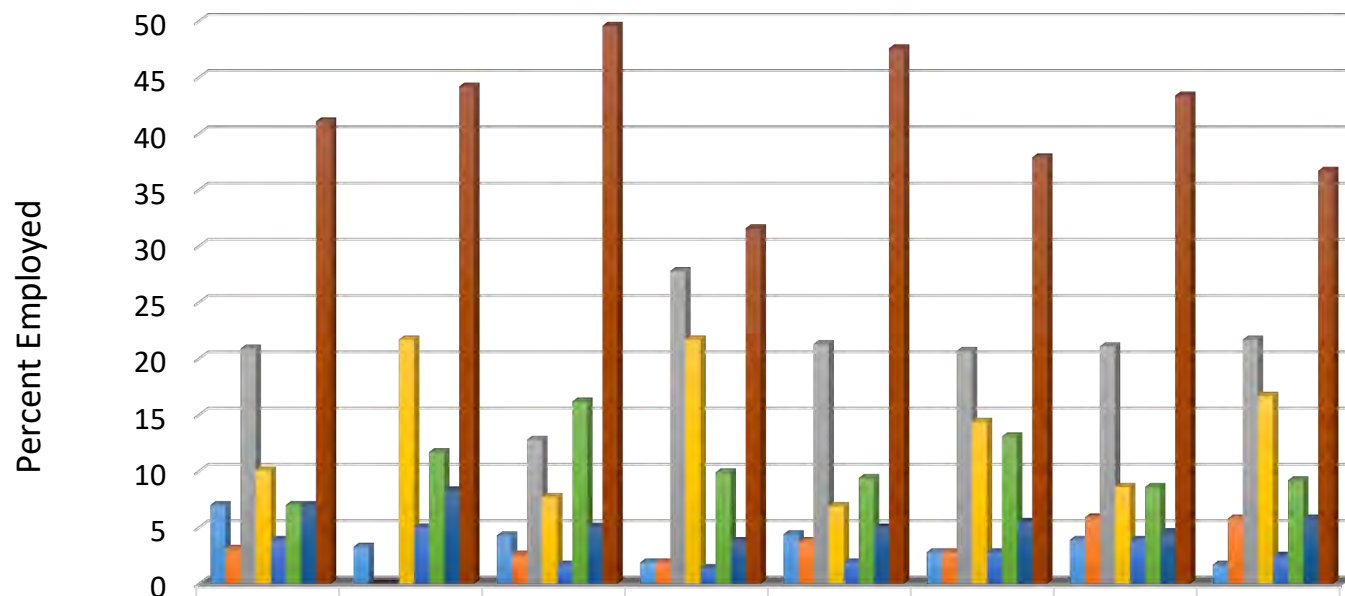
Academic Year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Unknown	7.0	3.3	4.3	1.9	4.4	2.8	3.9	1.7
Postponed employment	3.1	0.0	2.6	1.9	3.8	2.8	5.9	5.8
Postdoctoral position	20.9	0.0	12.8	27.8	21.3	20.7	21.1	21.7
Research position	10.1	21.7	7.7	21.7	6.9	14.4	8.6	16.7
Administrative position	3.9	5.0	1.7	1.4	1.9	2.8	3.9	2.5
Clinical position in non-academic setting	7.0	11.7	16.2	9.9	9.4	13.1	8.6	9.2
Clinical position in academic setting	7.0	8.3	5.1	3.8	5.0	5.5	4.6	5.8
Faculty/academic position	41.1	44.2	49.6	31.6	47.6	37.9	43.4	36.7

31

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

Full Time Faculty Openings

Degree Area	2017-2018
Audiology	45
SLP	196
Hearing sciences	5
Speech/language sciences	19
No specific area of study	19
Total	284

Source: http://www.asha.org/Academic/HES/CSD-Education-Survey-Data-Reports/

In summary

Remained Relatively Stable

- Median capacity for admissions

Changes

- Number of PhD programs since 2010

- Percent filled capacity

- Total enrollment

- Degrees granted

PhD Supply

- Too many unknown factors to confidently predict whether supply is meeting demand

Related ASHA Initiatives

Strategic Pathway

- Advance Interprofessional Education and Collaborative Practice

- Enhance the Generation, Publication, Knowledge Translation, and Implementation of Clinical Research

- Enhance Service Delivery Across the Continuum of Care to Increase Value and Access to Services

- Increase the Diversity of the Membership

- Enhance International Engagement

Other

- Advocacy

- Ensuring a Sufficient PhD Pipeline

- Informs Committee work (e.g., Academic Affairs Board, 2018-present Ad Hoc Committee on Graduate Education in SLP, 2017-2018 AuD Task Force)

Related CAPCSD Initiatives

Plural Research Scholarship Application

- Plural Publishing funds two scholarships to support graduate student research:
- **Masters/AuD level Award** for graduate students pursuing research in speech-language pathology or audiology
- **Doctoral-level Award** for Ph.D. students pursuing research in audiology, speech-language pathology, or speech-language-hearing sciences

PhD Scholarship Application

- CAPCSD supports a scholarship program for Ph.D.* students who are focused on pursuing an academic career in Communication Sciences and Disorders.

CAPCSD Leadership Academy

- A program to help individuals considering academic leadership positions, or who are newly engaged in academic leadership, develop their knowledge and skills in the area of leadership.

Survey Participation Rates – Above 85% since 2012-2013
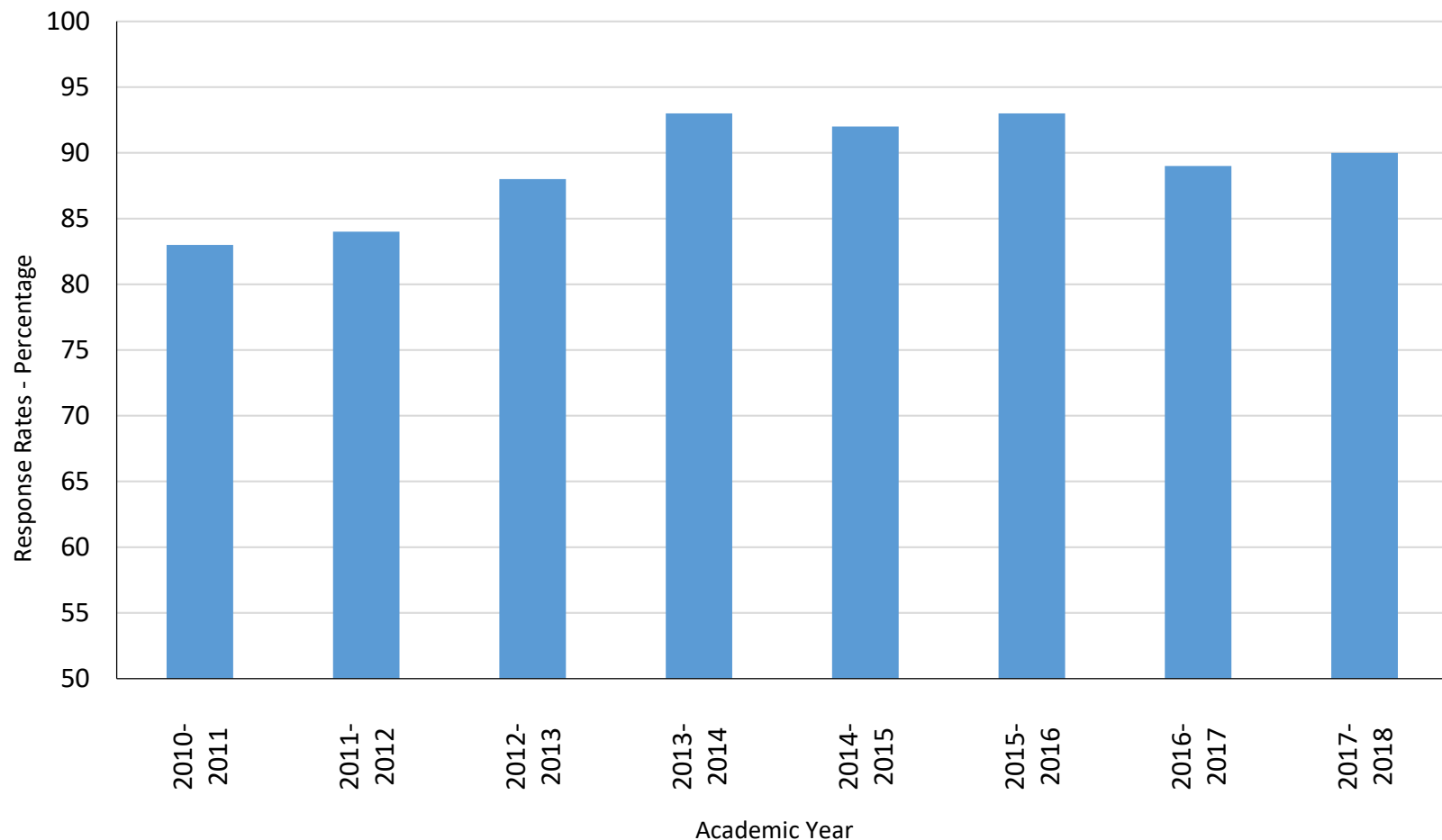
2018 CSD Education Survey

- Collected data for the fall 2017 to summer 2018 academic year
- National and state aggregate data reports and trend reports published in March 2019

2019 CSD Education Survey

- Opening August 1 and closing October 31
- Collecting data for the fall 2018 to summer 2019 academic year
- National and state aggregate data reports will be published in March 2020

Survey Updates: What's Staying the Same

- **EdFind Connection**: The data from the survey will still be used to refresh your institution's EdFind profile upon survey submission

- **Access**: Same process for accessing your institution's survey

- **Roles**: There are still two levels of authorized survey access:
  - **Authorized program directors or chairs**
  - **Authorized "editors"**

- **Print Functionality:** Users can still print:
  - Blank copies of the survey (from the survey welcome page)
  - Completed surveys after submission

Survey Updates: What to Expect

- Change 1: the **2019 CSD Education Survey** will use a new survey platform: Qualtrics

- Change 2: complex questions and tables have been simplified

- Change 3: new user friendly look and feel

Your Dashboard: A New Look and Feel

Survey Flow

- **The CSD Education Survey is broken down into two parts:**
  - **Part I: Institution Portfolio section**
    - **Consists of roughly 50% of survey questions**
    - **Questions focus on program characteristics and special features**
    - **Data will be saved year-to-year, with ability to edit each year**
  - **Part II: Current Survey section**
    - **Consists of roughly 50% of survey questions**
    - **Questions consist of data tables, student counts, demographics**
    - **Data must be entered each year**

Survey Updates: Part I of the Survey

Part I consists of your **Institution Portfolio**

For entering basic program information, such as:

- **Application deadlines**
- **Contact info**
- **Specialty tracks**

For the 2019 survey, users **must complete** the Institution Portfolio form from start to finish **in one sitting**

For the 2020 survey year, you will only need to make edits where necessary and verify the data

Program directors or chairs are the only ones who can complete the Institution Portfolio

The Benefit to Users

✓ **Your Institution Portfolio form will save your data year-to-year, saving you time when editing your data**

✓ **Users can access their Institution Portfolio at any time throughout the year to make updates to important information**

Survey Updates: Part II of the Survey

Part II consists of the Current Survey Data Tables

Only program directors and chairs with authorization can begin the survey and select their programs. Authorized "editors" can only enter the survey after program selection has been made

The dashboard will display the survey academic year, the start and end dates, and the status towards completion

Once started, users can enter and exit the survey at any time; data entered will be saved

At the end of the survey, program directors and chairs with authorization must submit their survey

The Benefit to Users

✓ **The visual display is easy to navigate**

✓ **The dashboard informs users when their survey has been submitted, enabling users to then 'view and print' the data they've entered**

Survey Updates: Help Resources

The **top navigation** provides helpful resources, including:

- **Information about the survey**
- **A direct link to EdFind**
- **A link to ASHA's survey contact email for questions or concerns**

The top navigation also enables users to logout or go back to their ASHA Account

The Benefit to Users

✓ **Provide resources to help users learn more about the survey, search their EdFind profile, and contact ASHA for any questions**

Survey Updates: Question Changes

The following updates have been made to the survey questionnaire to reduce the time it takes to complete the survey:

- Simplifying complex tables
  - Demographic information entered by category instead of in multiple-level tables
- Eliminating questions where responses were difficult to estimate/measure
  - For example, the number of qualified students who were not offered admission
- Consolidating questions about the Research Doctorate program into one set
  - No longer repeating the same information for each area of study

References

Council of Academic Programs in Communication Sciences and Disorders and American Speech-Language-Hearing Association. (2019). *CSD Education Survey National Aggregate Data Report: 2017–2018 Academic Year*. Retrieved from www.asha.org and www.capcsd.org.

American Speech-Language-Hearing Association, *Highlights and Trends: Member and Affiliate Counts, Year-End 2018.* https://www.asha.org/uploadedFiles/2018-Member-Counts.pdf (accessed on 3/7/19)

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, A*udiologists. https://www.bls.gov/ooh/healthcare/audiologists.htm (accessed on 3/7/19).

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook,* Speech-Language Pathologists. https://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm (accessed on 3/7/19).

Addendum: Additional Workforce Data

- Audiology:
  - Number of ASHA-Certified Audiologists
  - Count Comparison of Audiologists and New Graduates
  - Annual Mean Wage of Audiologists by State

- Speech-Language Pathology:
  - Number of ASHA-Certified Speech-Language Pathologists
  - Count Comparison of Speech-Language Pathologists and New Graduates
  - Annual Mean Wage of Speech-Language Pathologists by State

- PhD Faculty Workforce by Age and Year

ASHA-Certified Audiologists
1998 to 2018
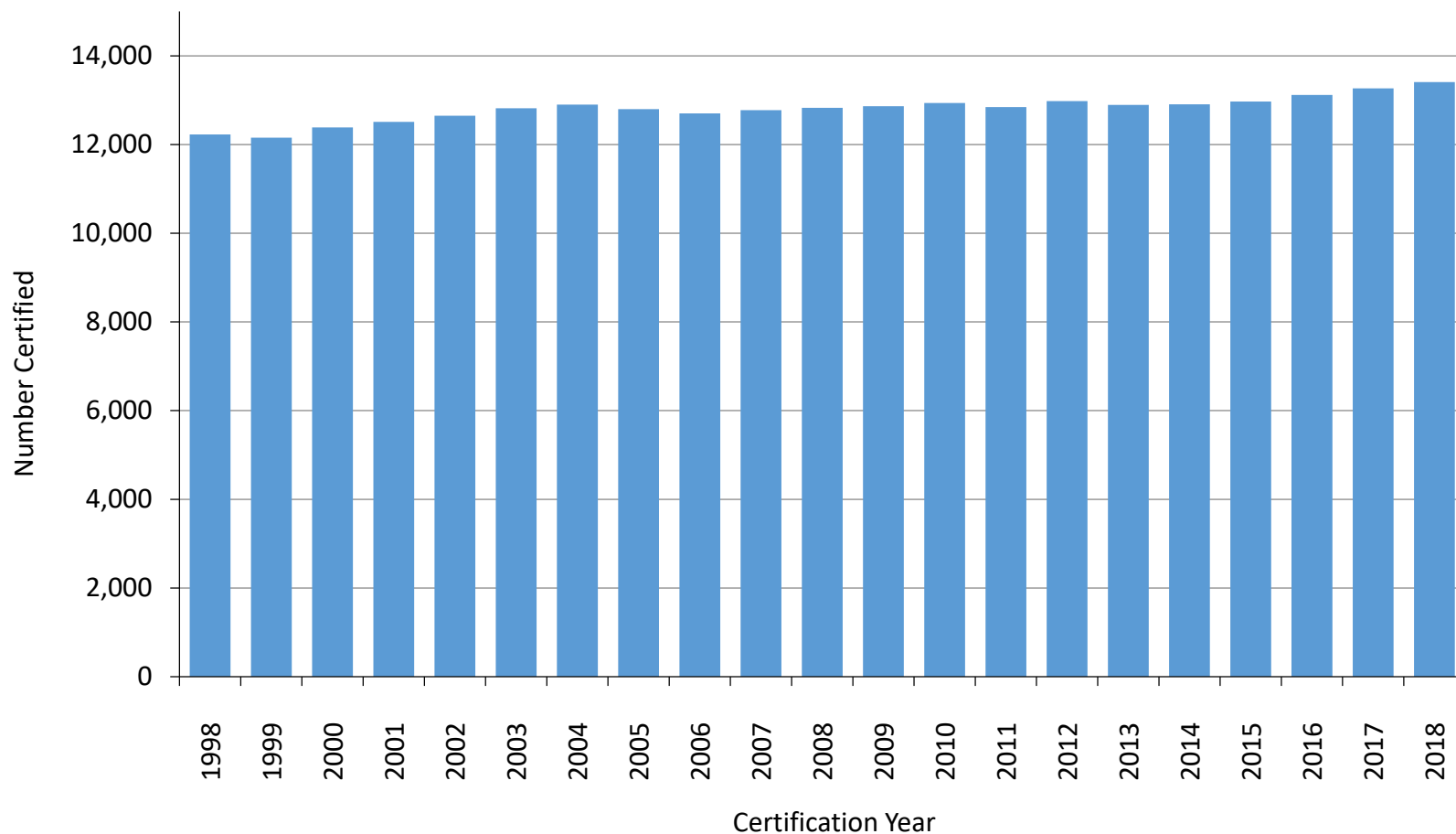
Count Comparison of Audiologists and New Graduates

U.S. Bureau of Labor Statistics

- 14,800 audiologists employed in 2016
- 13,118 held ASHA CCC-A in 2016

New audiologists entering the field

- 689 graduates in the 2016-2017 academic year
- 547 applications for ASHA CCC-A in 2017
  - New graduates have up to 5 years to apply for certification

Annual Mean Wage of Audiologists
by State, May 2017

Annual mean wage of audiologists, by state, May 2017

Annual mean wage
$53,850 - $70,170
$70,730 - $77,030
$78,400 - $84,430
$84,790 - $122,190

Blank areas indicate data not available.

Source: https://www.bls.gov/oes/current/oes291181.htm#st
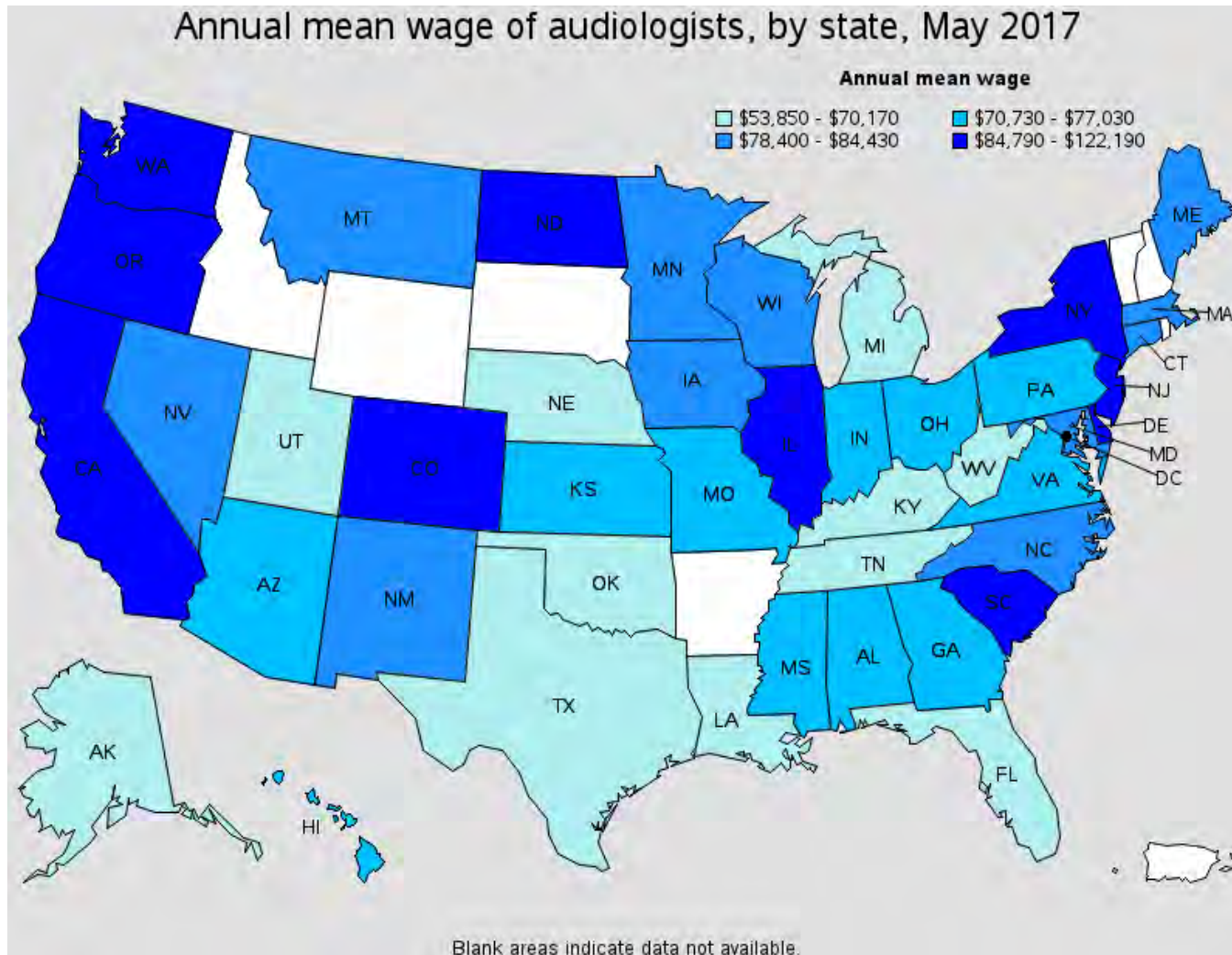
ASHA Certified SLPs
1998 to 2018

Sources: http://www.asha.org/Research/memberdata/member-counts/
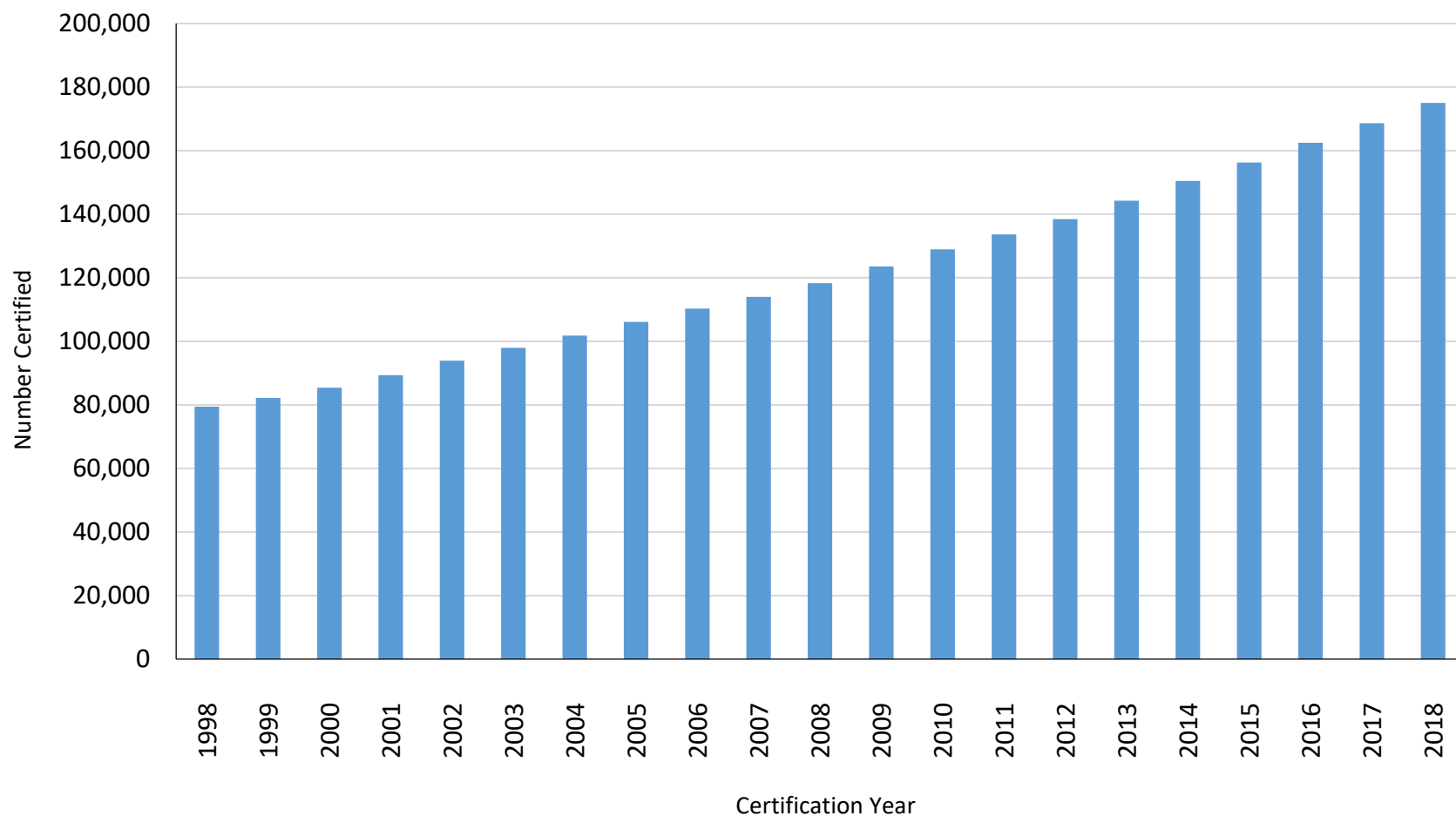
Count Comparison of SLPs and New Graduates

U.S. Bureau of Labor Statistics
- 145,100 SLPs employed in 2016
- 162,473 held ASHA CCC-SLP in 2016

New graduates entering the field
- 7,759 graduates in 2016-2017
- 7,848 applications for ASHA CCC-SLP in 2017
  - New graduates have up to 5 years to apply for certification

Annual Mean Wage of Speech-Language Pathologists
by State, May 2017

Annual mean wage of speech-language pathologists, by state, May 2017

Source: https://www.bls.gov/oes/current/oes291181.htm#st
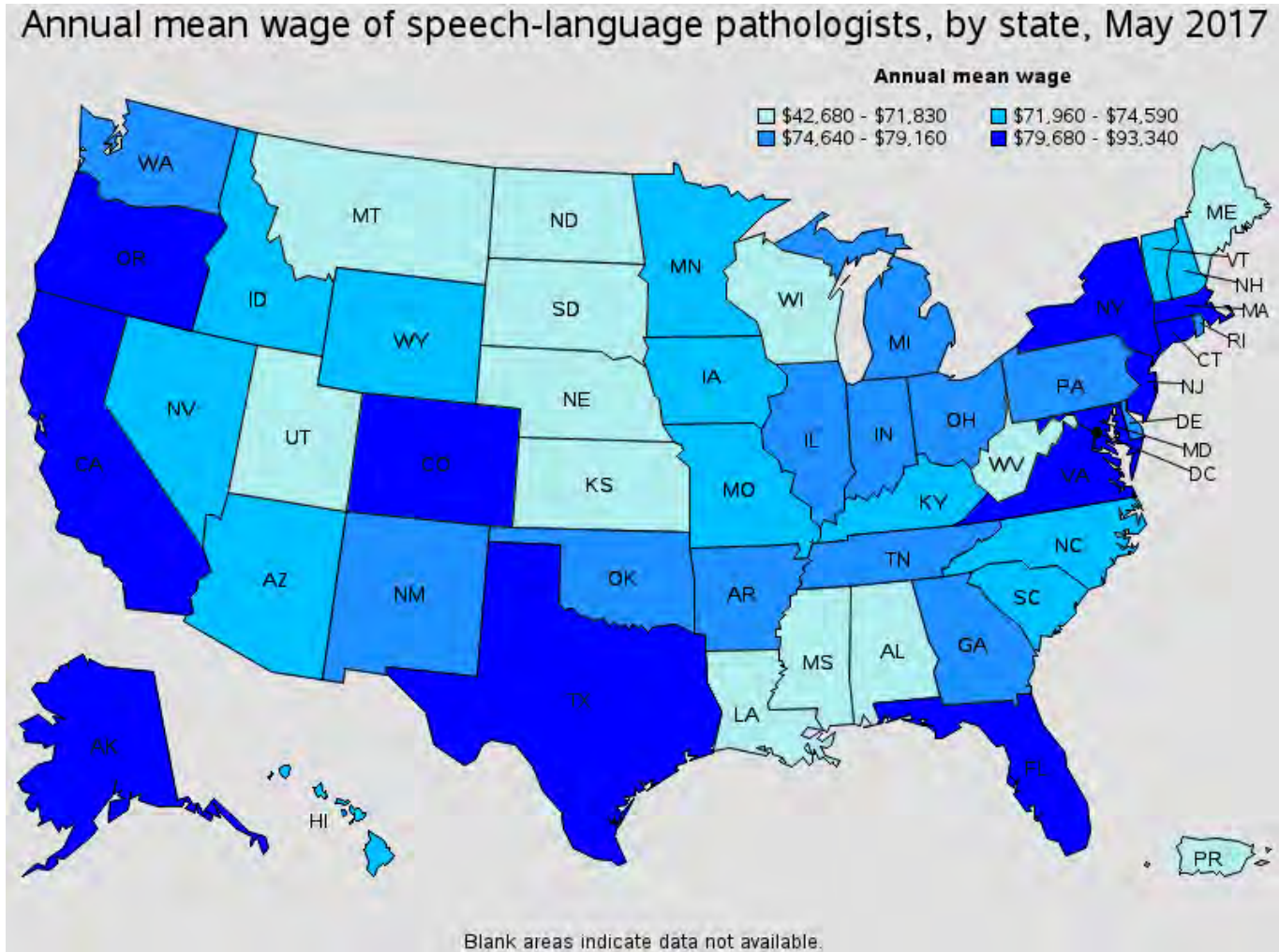
PhD Faculty Workforce

Percentage of ASHA-Member PhD Faculty in CSD by Age Group and Year

	35 or younger	36-40	41-45	46-50	51-55	56-60	61-65	66 or older
Year-End 2002	2	5	11	20	22	17	11	12
Year-End 2008	6	7	7	12	17	20	14	17
Year-End 2014	10	11	10	9	9	15	17	19
Year-End 2016	8	11	11	11	8	12	17	21
Year-End 2018	11	11	12	11	8	10	14	23
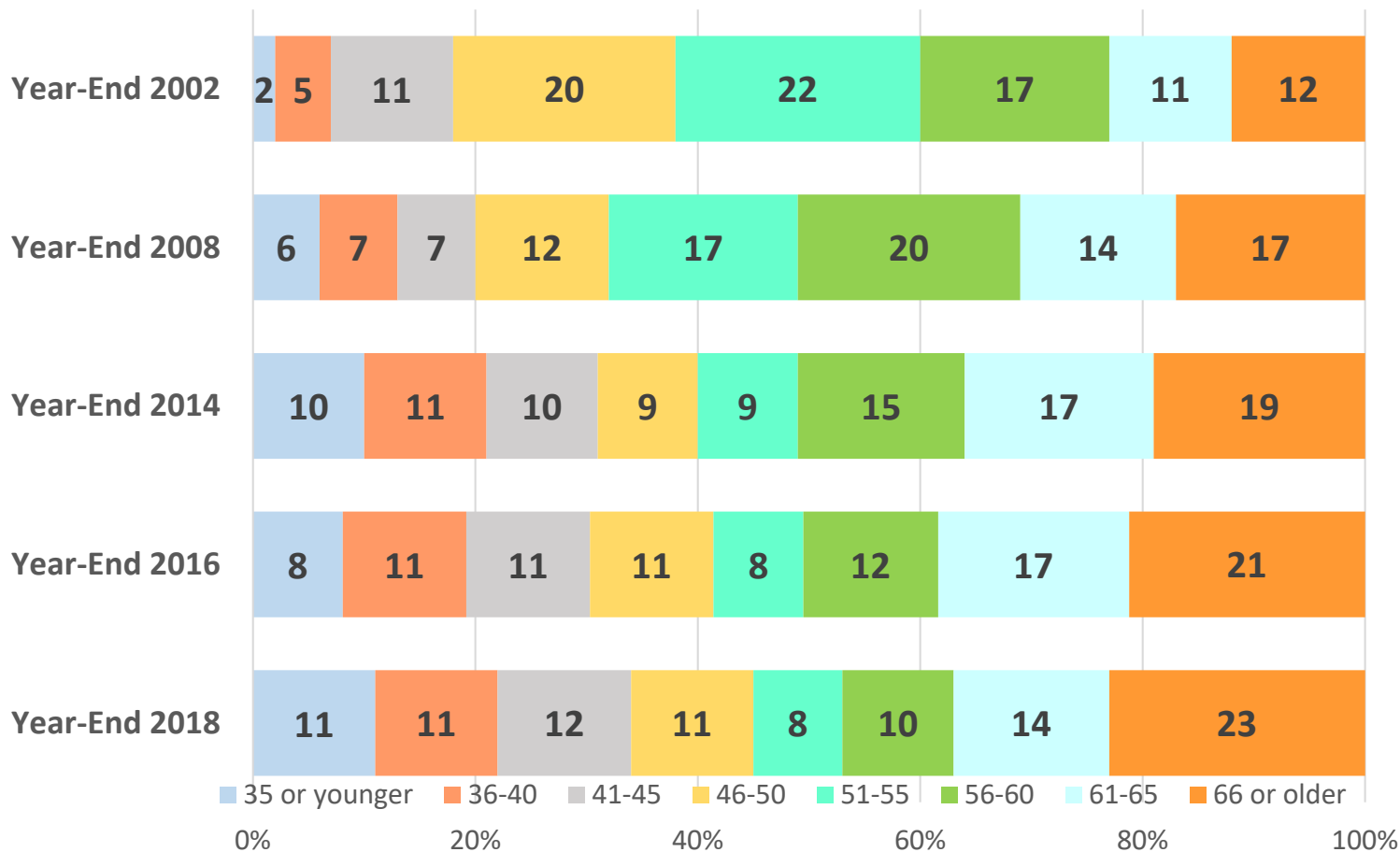
Data on Your Side: Supply and Demand for Faculty-Researchers and Clinicians

Abstract

What data may help show the need for maintaining or expanding current academic programs? Are we preparing a sufficient number of speech-language pathologists, audiologists, and faculty-researchers to meet workforce demands? How is the discipline advancing to increase diversity in the field? This session will feature reviews of current clinical and research personnel pipeline data, workforce data, and workforce demands in audiology and speech-language pathology.

Learner Outcomes

✓ *Identify data collected through the CSD Education Survey, the U.S. Bureau of Labor Statistics, and ASHA Survey Research and Reports that can describe current workforce characteristics and employment projections for the audiology and speech-language pathology professions.*

✓ *Describe national data trends for admission, enrollment, and graduation rates among graduate audiology and speech-language pathology programs, including trends toward increasing diversity in the field.*

✓ *Describe national data trends for PhD researcher education and employment in communications sciences and disorders.*
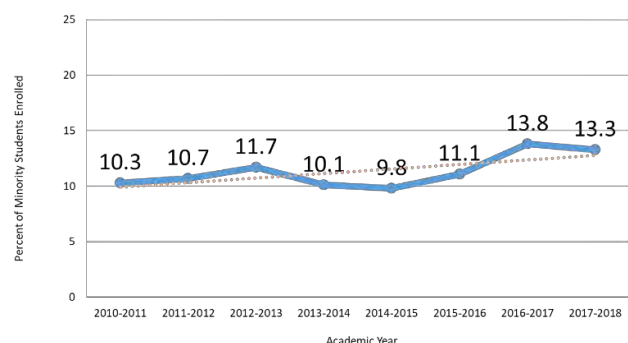

Audiology

Total enrollment for audiology clinical doctorate entry-level programs was 3,054 in the 2017–2018 academic year, a 21.2% increase over 2010–2011. The percentage of minorities enrolled in audiology clinical doctorate entry-level programs averaged 11.4% between 2010-2011 and 2017-2018, ranging from 9.8% in 2014-2015 to 13.8% in 2016-2017.

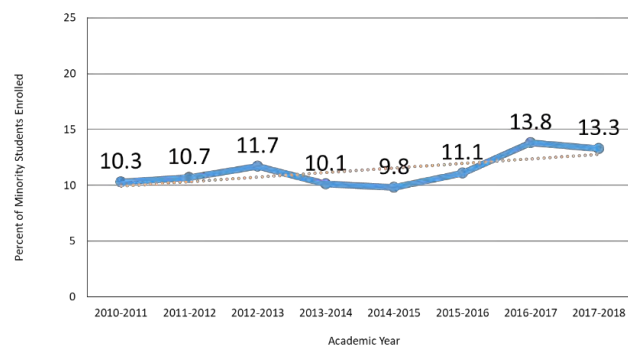### Total Enrollment for AuD Programs
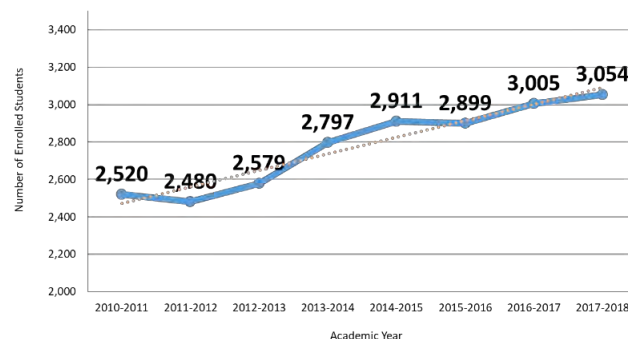
Minority Enrollment for AuD Programs

The number of audiology clinical doctorate entry-level degrees granted increased from 502 in 2008–2009 to 712 in 2017–2018, a 41.8% increase, and averaged 626 over the 10-year period. The majority of audiologists—46%—report their primary employment facility as a nonresidential health care facility, which includes private practice settings. Hearing loss increases as people age, so the aging population is likely to increase demand for audiologists

AuD Degrees Granted

Job Growth for Audiologists

> Much faster than average growth through 2026

> Additional 3,100 audiologists needed
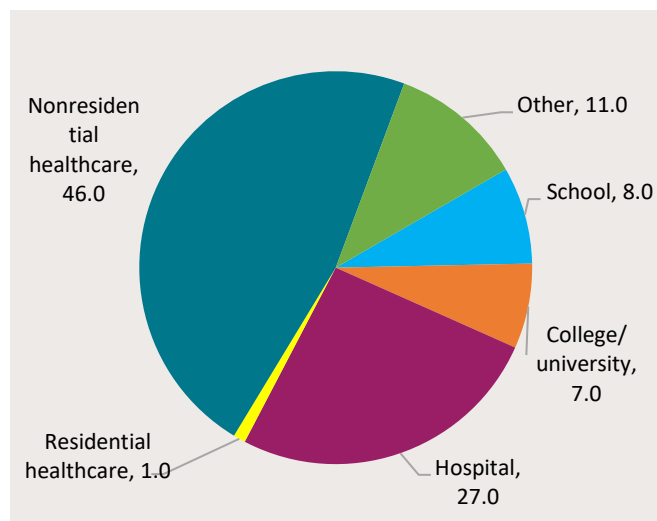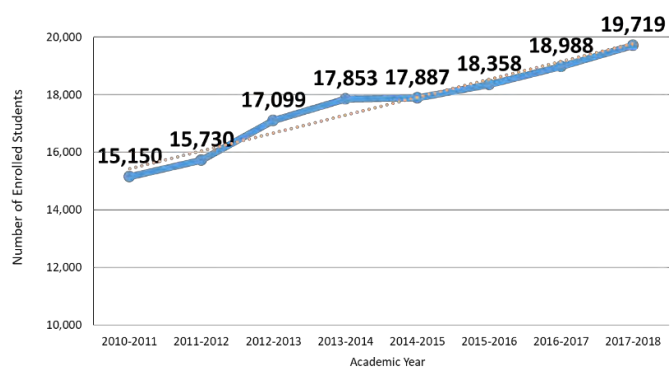
> 21% increase in job openings
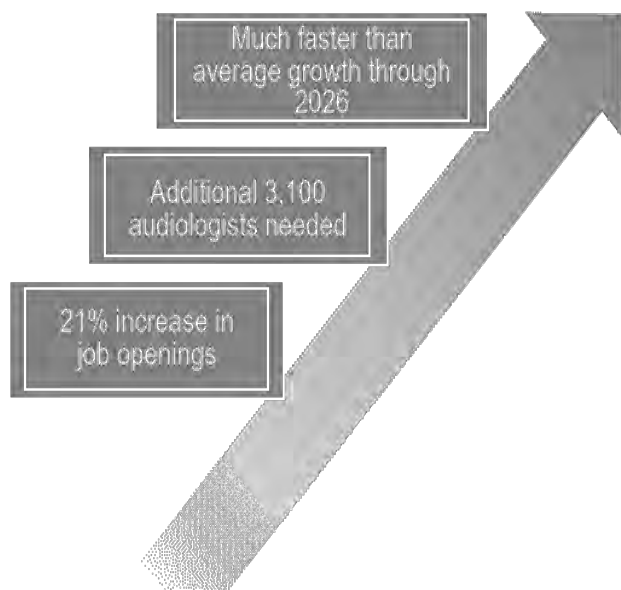
Primary Employment Facility for Audiologists

- Nonresidential healthcare, 46.0
- Other, 11.0
- School, 8.0
- College/ university, 7.0
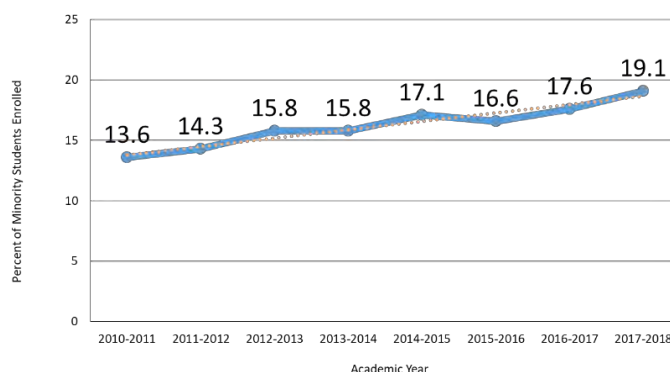- Hospital, 27.0
- Residential healthcare, 1.0

Speech-Language Pathology

Total enrollment for speech-language pathology master's programs steadily increased between 2010-2011 and 2017-2018, reaching 19,719 in the 2017–2018 academic year, a 30.2% increase over 2010–2011. The percentage of minorities enrolled in speech-language pathology master's programs mostly trended upward between the 2010–2011 and 2017–2018 academic years, from 13.6% in 2010-2011 to 19.1% in the most recent academic year (2017-2018).
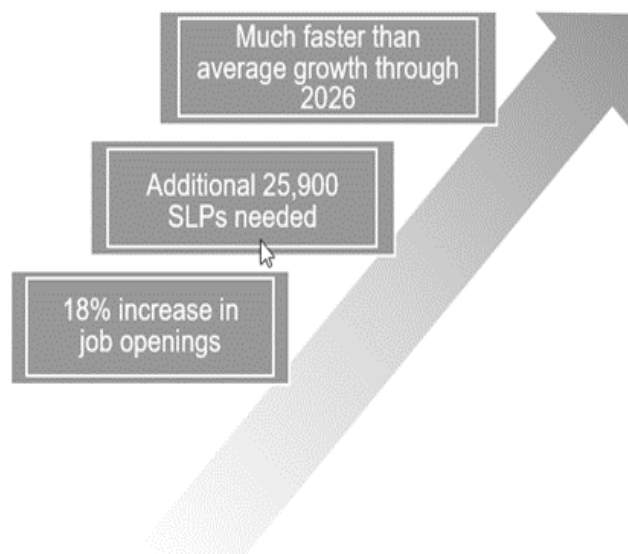
Total Enrollment for SLP Programs

Number of Enrolled Students vs. Academic Year: 15,150 (2010-2011), 15,730 (2011-2012), 17,099 (2012-2013), 17,853 (2013-2014), 17,887 (2014-2015), 18,358 (2015-2016), 18,988 (2016-2017), 19,719 (2017-2018)

Minority Student Enrollment for SLP Programs

Percent of Minority Students Enrolled vs. Academic Year: 13.6 (2010-2011), 14.3 (2011-2012), 15.8 (2012-2013), 15.8 (2013-2014), 17.1 (2014-2015), 16.6 (2015-2016), 17.6 (2016-2017), 19.1 (2017-2018)
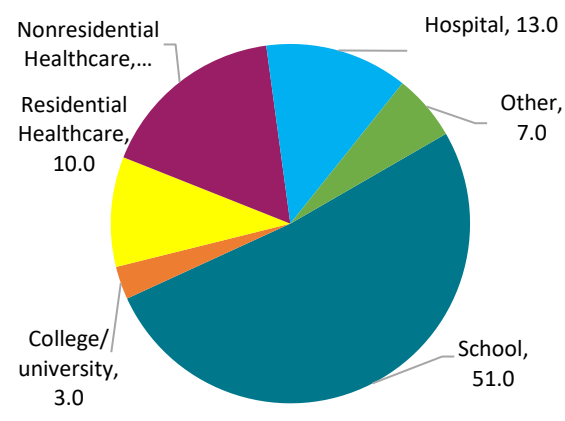
The number of speech-language pathology master's degrees granted steadily increased from 6,441 in 2008–2009 to 8,531 in 2017–2018, a 32.4% increase. More than half—51%—of SLPs are employed in a school setting. The national employment rate of SLPs is expected to demonstrate faster than average growth through 2026.

Job Growth for SLPs

> Much faster than average growth through 2026

> Additional 25,900 SLPs needed

> 18% increase in job openings

Primary Employment Facility for SLPs

Nonresidential Healthcare,…
Residential Healthcare, 10.0
College/ university, 3.0
School, 51.0
Hospital, 13.0
Other, 7.0

PhD Faculty-Researchers

Total enrollment in CSD research doctoral programs for the time period from 2010–2011 to 2017–2018 shows some fluctuation from year to year, ranging from 870 in 2011-2012 to 977 in 2012-2013. Total enrollment was 896 in the most recent academic year, averaging 914 over the 8-year period.

Total Enrollment for PhD Programs
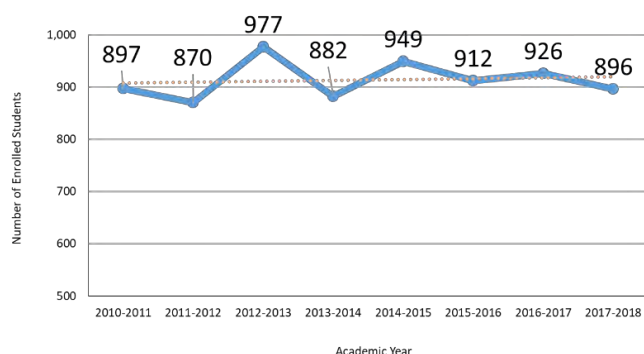
The number of research doctoral degrees granted averaged 150 between 2008-2009 and 2017-2018, ranging from 118 in 2010-2011 to 201 in 2013-2014. A total of 149 research doctoral degrees were granted in 2017-2018.

Research Doctoral Degrees Granted
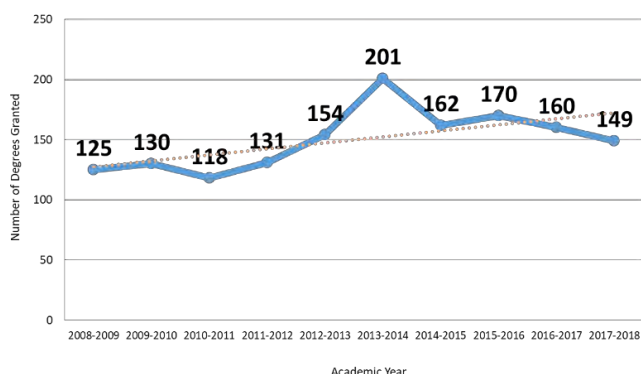
The percentage of research doctoral graduates pursuing a faculty or academic position as their first employment was 36.7% in 2017–2018, averaging 41.5% between 2010–2011 and 2017–2018. Those taking a research position increased from 8.9% in 2016–2017 to 16.7% in 2017–2018. About one fifth (21.7%) of 2017–2018 research doctoral graduates held a postdoctoral position.

Full Time Faculty Openings

Degree Area	2017-2018
Audiology	45
SLP	196
Hearing sciences	5
Speech/language sciences	19
No specific area of study	19
Total	284

Presenters & Disclosures

Loretta Nunez has a financial relationship with the American Speech-Language-Hearing Association that pays her salary.

Jennifer P. Taylor has a nonfinancial relationship with the Council of Academic Programs in Communication Sciences and Disorders as VP of Organizational Advancement.

Judy Blackburn has a financial relationship with the American Speech-Language-Hearing Association that pays her salary.

Sarah Slater has a financial relationship with the American Speech-Language-Hearing Association that pays her salary

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